

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

Department for Environmental Protection

Division for Air Quality

(Amendment)

401 KAR 51:052. Review of new sources in or impacting upon nonattainment areas.

RELATES TO: KRS 224.20-100, 224.20-110, 224.20-120, 40 C.F.R. [CFR] Part 51, Subpart I, 51.165, 51.166(g), 52.21, 52.21(r), 60, 61, 81, Subpart D, 81.318, [June 28, 1989 ~~Federal Register~~ (54 ~~FR~~ 27274);] 42 U.S.C. [USC] 7401-7626, 7407(d)(1)(A)(i), (ii), and (iii), 7410

STATUTORY AUTHORITY: KRS 224.10-100, 40 C.F.R. 51.165, 42 U.S.C. 7401-7671g (Clean Air Act)

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the [Natural Resources and] Environmental and Public Protection Cabinet to promulgate [prescribe] administrative regulations for the prevention, abatement and control of air pollution. This administrative regulation establishes requirements for the construction or modification of stationary sources within, or impacting upon, areas where the national ambient air quality standards have not been attained. The provisions of this administrative regulation are neither different nor more stringent than the federal regulation 40 C.F.R. 51.165.

[Section 1. Definitions. ~~As used in this administrative regulation, terms not~~

1 ~~defined shall have the meaning given them in 401 KAR 51:001 or, for terms relating to~~

1 the protection of visibility, in 401 KAR 51:017.

2 ~~(1) "Actual emissions" means the actual rate of emissions of a pollutant from~~
3 ~~an emission unit, as determined in accordance with paragraphs (a) to (c) of this~~
4 ~~subsection.~~

5 ~~(a) Actual emissions as of a particular date shall equal the average rate, in~~
6 ~~tons per year, at which the emission unit actually emitted the pollutant during a two (2)~~
7 ~~year period which precedes the particular date and which is representative of normal~~
8 ~~source operation. The cabinet shall allow the use of a different time period upon a~~
9 ~~determination that it is more representative of normal source operation. Actual~~
10 ~~emissions shall be calculated using the emission unit's actual operating hours,~~
11 ~~production rates, and types of materials processed, stored, or combusted during the~~
12 ~~selected time period.~~

13 ~~(b) The cabinet may presume that source specific allowable emissions for the~~
14 ~~emission unit are equivalent to the actual emissions of the emission unit.~~

15 ~~(c) For an emission unit which has not begun normal operations on the~~
16 ~~particular date, actual emissions shall equal the potential to emit of the emission unit on~~
17 ~~that date.~~

18 ~~(2) "Adverse impact on visibility" means visibility impairment which interferes~~
19 ~~with the management, protection, preservation or enjoyment of the visitor's visual~~
20 ~~experience of the Class I area.~~

21 ~~(3) "Allowable emissions" means the emissions rate calculated using the~~
22 ~~maximum rated capacity of the source (unless the source is subject to state and~~
23 ~~federally enforceable permit conditions which limit operating rate, or hours of operation,~~

or both) and the most stringent of the following:

(a) ~~The applicable new source performance standards set forth in Title 401, Chapters 57 and 59, or 40 CFR Parts 60 and 61;~~

(b) ~~Any other state and federally approved regulatory emission limitations, including those with a future compliance date; or~~

(c) ~~The emission rate specified as a state and federally enforceable permit condition, including those with a future compliance date.~~

(4) ~~"Begin actual construction" means initiation of physical on-site construction activities on an emission unit which are of a permanent nature. Activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operating, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.~~

(5) ~~"Building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one (1) or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control), except the activities of a vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same major group (i.e., they have the same two (2) digit code) as described in the Standard Industrial Classification Manual, 1987, as incorporated by reference in Section 21 of 401 KAR 51:017.~~

(6) ~~"Classification date" means September 22, 1982.~~

(7) ~~"Commence" as applied to construction of a major stationary source or~~

~~major modification, means that the owner or operator has all necessary preconstruction approvals or permits and has either:~~

~~(a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or~~

~~(b) Entered into agreements or contractual obligations which cannot be cancelled or modified without substantial loss to the owner or operator to undertake a program of actual construction of the source to be completed within a reasonable time.~~

~~(8) "Construction" means a physical change or change in the method of operation, including fabrication, erection, installation, demolition, or modification of an emission unit, which would result in a change in actual emissions.~~

~~(9) "Emission unit" means a part of a stationary source which emits or would have the potential to emit a pollutant subject to regulation under 42 USC 7401-7626.~~

~~(10) "Federal land manager" means, with respect to lands in the United States, the secretary of the department with authority over those lands.~~

~~(11) "Federally enforceable" means all limitations and conditions which are enforceable by the U.S. Environmental Protection Agency (U.S. EPA), including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within an applicable State Implementation Plan, and a permit requirement established pursuant to 40 CFR 52.21, or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under a U.S. EPA-approved program incorporated into the State Implementation Plan, which expressly requires adherence to a permit issued under the program.~~

~~(12) "Fugitive emissions" means those emissions that could not reasonably~~

1 ~~pass through a stack, chimney, vent, or other functionally equivalent opening.~~

2 ~~(13) "Lowest achievable emissions rate" means, for a source, the more~~
3 ~~stringent rate of emissions based on the following:~~

4 ~~(a) The most stringent emissions limitation contained in an implementation~~
5 ~~plan of a state for the class or category of stationary source, unless the owner or~~
6 ~~operator of the proposed stationary source demonstrates that the limitation is not~~
7 ~~achievable; or~~

8 ~~(b) The most stringent emissions limitation achieved in practice by the class~~
9 ~~or category of stationary source. This limitation, when applied to a major modification,~~
10 ~~means the lowest achievable emissions rate for the new or modified emission unit~~
11 ~~within the stationary source. The application of this term shall not permit a proposed~~
12 ~~new or modified stationary source to emit a pollutant in excess of the amount allowable~~
13 ~~under an applicable standard under Title 401, Chapters 57 and 59, and 40 CFR Parts~~
14 ~~60 and 61.~~

15 ~~(14) "Major modification" means a physical change in or change in the method~~
16 ~~of operation of a major stationary source that would result in a significant net emissions~~
17 ~~increase of a pollutant subject to regulation under 42 USC 7401-7626.~~

18 ~~(a) A net emissions increase that is significant for volatile organic compounds~~
19 ~~shall be significant for ozone.~~

20 ~~(b) A physical change or change in the method of operation shall not include:~~

21 ~~1. Routine maintenance, repair, and replacement;~~

22 ~~2. Use of alternative fuel or raw material by reason of an order or by reason~~
23 ~~of a natural gas curtailment plan in effect under a federal act;~~

1 3. ~~Use of an alternative fuel at a steam generating unit to the extent that the~~
2 ~~fuel is generated from municipal solid waste;~~

3 4. ~~Use of an alternative fuel or raw material by a stationary source that:~~

4 a. ~~The source was capable of accommodating before December 21, 1976,~~
5 ~~unless the change would be prohibited under a permit condition established after~~
6 ~~December 21, 1976, pursuant to 40 CFR 52.21 or pursuant to 401 KAR 51:017 or~~
7 ~~under regulations established pursuant to 40 CFR 51.165; or~~

8 b. ~~The source is approved to use under a permit issued under this~~
9 ~~administrative regulation;~~

10 5. ~~An increase in hours of operation or in production rate, unless the change~~
11 ~~is prohibited under a permit condition that was established after December 21, 1976,~~
12 ~~pursuant to 40 CFR 52.21 or pursuant to 401 KAR 51:017 or under regulations~~
13 ~~established pursuant to 40 CFR 51.165; or~~

14 6. ~~A change in ownership at a stationary source.~~

15 (15) ~~"Major stationary source" means:~~

16 (a) ~~Except as provided in paragraph (b) of this subsection, a stationary~~
17 ~~source that emits, or has the potential to emit, 100 tons per year or more of a pollutant~~
18 ~~subject to regulation under 42 USC 7401-7626.~~

19 (b) ~~For ozone nonattainment areas, a stationary source or group of sources~~
20 ~~located within a contiguous area and under common control that emits or has the~~
21 ~~potential to emit the following:~~

22 1. ~~For areas classified as serious, fifty (50) tons per year or more of volatile~~
23 ~~organic compounds (VOCs) or nitrogen oxides (NO_x);~~

1 ~~2. For areas classified as severe, twenty five (25) tons per year or more of~~
2 ~~VOCs or NO_x;~~

3 ~~3. For areas classified as extreme, ten (10) tons per year or more of VOCs~~
4 ~~or NO_x.~~

5 ~~(c) A physical change that would occur at a stationary source not qualifying~~
6 ~~under paragraph (a) or (b) of this subsection as a major stationary source, if the change~~
7 ~~would constitute a major stationary source by itself.~~

8 ~~(d) A source that is major for VOCs shall be considered major for ozone.~~

9 ~~(16) "Mandatory Class I federal area" means an area identified in 40 CFR 81,~~
10 ~~Subpart D, where the Administrator of the U.S. EPA, in consultation with the Secretary~~
11 ~~of the United States Department of the Interior, has determined visibility to be an~~
12 ~~important value.~~

13 ~~(17) "Natural conditions" means naturally occurring phenomena that reduce~~
14 ~~visibility as measured in terms of visual range, contrast, or coloration.~~

15 ~~(18) "Necessary preconstruction approvals or permits" means the permits or~~
16 ~~approvals required under the regulations of Title 401, Chapters 50 to 63.~~

17 ~~(19) "Net emissions increase" means the amount by which the sum of~~
18 ~~paragraphs (a) and (b) of this subsection exceeds zero:~~

19 ~~(a) An increase in actual emissions from a particular physical change or~~
20 ~~changes in method of operation at a stationary source; and~~

21 ~~(b) Another increase or decrease in actual emissions at the source that is~~
22 ~~contemporaneous with the particular change and is otherwise creditable.~~

23 ~~(c) An increase or decrease in actual emissions is contemporaneous with the~~

1 increase from the particular change only if it occurs between the date which is ten (10)
2 years before construction on the particular change commences, but not before
3 December 21, 1976, and the date that the increase from the particular change occurs.

4 (d) — An increase or decrease in actual emissions shall be creditable only if the
5 cabinet has not relied on it in issuing a permit for the source under this administrative
6 regulation, which permit is in effect when the increase in actual emissions from the
7 particular change occurs.

8 (e) — An increase in actual emissions shall be creditable only to the extent that
9 the new level of actual emissions exceeds the old level.

10 (f) — A decrease in actual emissions shall be creditable only to the extent that:

11 1. — The old level of actual emissions or the old level of allowable emissions,
12 whichever is lower, exceeds the new level of actual emissions;

13 2. — It is state and federally enforceable at and after the time that actual
14 construction on the particular change begins;

15 3. — The cabinet has not relied on it in issuing a permit or in demonstrating
16 attainment or reasonable further progress; and

17 4. — It has the same qualitative significance for public health and welfare as
18 that attributed to the increase from the particular change.

19 (g) — An increase that results from a physical change at a source occurs when
20 the emission unit on which construction occurred becomes operational and begins to
21 emit a particular pollutant. A replacement unit that requires shakedown becomes
22 operational only after a reasonable shakedown period, not to exceed 180 days.

23 (20) — "Potential to emit" means the maximum capacity of a stationary source to

1 ~~emit a pollutant under its physical or operational design. A physical or operational~~
2 ~~limitation on the capacity of the source to emit a pollutant, including air pollution control~~
3 ~~equipment and restrictions on hours of operation or on the type or amount of material~~
4 ~~combusted, stored, or processed, shall be treated as part of its design if the limitation~~
5 ~~or the effect it would have on emissions is state and federally enforceable. Secondary~~
6 ~~emissions shall not be counted in determining the potential to emit of a stationary~~
7 ~~source.~~

8 ~~(21) "Reasonable further progress" means annual incremental reductions in~~
9 ~~emissions of the applicable air pollutant which are sufficient, in the judgment of the~~
10 ~~cabinet and the U.S. EPA, to provide for attainment of the applicable ambient air quality~~
11 ~~standard by the date specified in 401 KAR 51:010, Section 2.~~

12 ~~(22) "Secondary emissions" means emissions which would occur as a result of~~
13 ~~the construction or operation of a major stationary source or major modification, but do~~
14 ~~not come from the major stationary source or major modification itself. For this~~
15 ~~administrative regulation, secondary emissions shall be specific, well defined, and~~
16 ~~quantifiable, and shall impact the same general area as the stationary source or~~
17 ~~modification which causes the secondary emissions. Secondary emissions include~~
18 ~~emissions from an off-site support facility that would otherwise not be constructed or~~
19 ~~increase its emissions as a result of the construction or operation of the major~~
20 ~~stationary source or major modification. Secondary emissions shall not include~~
21 ~~emissions which come from a mobile source, e.g., the emissions from the tailpipe of a~~
22 ~~motor vehicle, from a train, or from a vessel.~~

23 ~~(23) "Significant" means, in reference to a net emissions increase or the~~

1 potential of a source to emit a pollutant, a rate of emissions that would equal or exceed
2 rates given in Section 12 of this administrative regulation.

3 (24) ~~"State Implementation Plan" means the most recently prepared plan or~~
4 ~~revision required by 42 USC 7410 which has been submitted by the cabinet and~~
5 ~~approved by the U.S. EPA.~~

6 (25) ~~"Stationary source" means a building, structure, facility, or installation that~~
7 ~~emits or may emit an air pollutant subject to regulation under 42 USC 7401-7626.~~

8 (26) ~~"Visibility impairment" means a humanly perceptible change in visibility~~
9 ~~(visual range, contrast, coloration) from that which would have existed under natural~~
10 ~~conditions.]~~

11 **Section 1 [2]. Applicability.** [(4)] This administrative regulation shall
12 apply to the construction of a new major stationary source or any project that is a major
13 modification at an existing major stationary source, which commences construction
14 after September 22, 1982, and locates in or impacts upon an area designated
15 nonattainment under 42 U.S.C. 7407(d)(1)(A)(i). [sources or modifications commenced
16 after the classification date defined in Section 1(6) of this administrative regulation and
17 that will locate in or impact upon an area designated as nonattainment pursuant to 42
18 USC 7407(d)(1)(A)(i). Area designations are contained in 40 CFR 81.318.]

19 (1)[(2)] The provisions of this administrative regulation relating to visibility
20 protection shall also apply to a major source[s] or a major modification[s] in
21 nonattainment areas that [which] potentially have an impact on visibility in a mandatory
22 Class I federal area.

23 (2) Applicability tests for projects. Except as provided in subsections (3) or

(4) of this section, a project shall be a major modification for a regulated NSR pollutant only if the project causes a significant emissions increase and a significant net emissions increase, as provided in paragraphs (a) and (b) of this subsection.

(a) Prior to beginning actual construction, the owner or operator shall first determine if a significant emissions increase will occur for the applicable type of unit being constructed or modified according to subparagraphs 1 to 4 of this paragraph.

1. Actual-to-projected actual applicability test for projects that only involve existing emissions units. A significant emissions increase of a regulated NSR pollutant shall be projected to occur if the sum of the difference between the projected actual emissions and the baseline actual emissions for each existing emissions unit equals or exceeds the significant amount for that pollutant.

2. Actual-to-potential test for projects that involve only construction of new emissions units. A significant emissions increase of a regulated NSR pollutant shall be projected to occur if the sum of the potential to emit from each new emissions unit following completion of the project equals or exceeds the significant amount for that pollutant.

3. Emissions test for projects that involve Clean Units. For a project that will be constructed and operated at a Clean Unit as provided in Sections 11 and 12 of this administrative regulation, without causing the unit to lose its Clean Unit designation, an emissions increase shall not be deemed to occur.

4. Hybrid test for projects that involve multiple types of emissions units. A significant emissions increase of a regulated NSR pollutant shall be projected to occur if the sum of the emissions increases for each emissions unit, using the methods

specified in subparagraphs 1 to 3 of this paragraph as applicable for each emissions unit, equals or exceeds the significant amount for that pollutant.

(b) Prior to beginning actual construction and after completing the applicable test in paragraph (a) of this subsection, the owner or operator shall determine for each regulated NSR pollutant if a significant net emissions increase will occur pursuant to 401 KAR 51:001, Section 1(146).

(3) For a plantwide applicability limit (PAL) for a regulated NSR pollutant at a major stationary source, the owner or operator of the major stationary source shall comply with the applicable requirements of Section 14 of this administrative regulation.

(4) An owner or operator undertaking a pollution control project (PCP) shall comply with Section 13 of this administrative regulation.

Section 2[3]. Initial Screening Analyses and Determination of Applicable Requirements.

(1) Review of all sources for emissions limitation compliance.

(a) The cabinet shall examine each proposed major new source and proposed major modification to determine if the source or modification will meet all applicable emissions [emission] requirements in the Kentucky State Implementation Plan (SIP) and 40 C.F.R. Parts 60 and 61 [Title 401, Chapters 50 to 63].

(b) If the cabinet determines from the application and all other available information that the proposed source or modification will not meet the applicable emissions [emission] requirements, the permit to construct shall be denied.

(2) Review of specified sources of air quality impact.

(a) [In addition,] The cabinet shall determine if a proposed [whether the]

major stationary source or major modification will ~~[would]~~ be constructed in an area designated as nonattainment pursuant to 42 U.S.C. ~~[USC]~~ 7407(d)(1)(A)(i) for a pollutant for which the stationary source or modification is major.

(b) If a designated nonattainment area is projected to be an attainment area as part of an approved control strategy by the new source start-up date, offsets shall not be required if the new source will ~~[would]~~ not cause a new violation.

(3) Fugitive emissions ~~[emission]~~ sources. Sections 4 and 10 ~~[5 and 11]~~ of this administrative regulation shall not apply to a source or modification that will ~~[would]~~ be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to one (1) of the following categories:

- (a) Coal cleaning plants ~~[{]with thermal dryers[}]~~;
- (b) Kraft pulp mills;
- (c) Portland cement plants;
- (d) Primary zinc smelters;
- (e) Iron and steel mills;
- (f) Primary aluminum ore reduction plants;
- (g) Primary copper smelters;
- (h) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- (i) Hydrofluoric, sulfuric, or nitric acid plants;
- (j) Petroleum refineries;

- (k) Lime plants;
- (l) Phosphate rock processing plants;
- (m) Coke oven batteries;
- (n) Sulfur recovery plants;
- (o) Carbon black plants, ~~[the furnace process]~~;
- (p) Primary lead smelters;
- (q) Fuel conversion plants;
- (r) Sintering plants;
- (s) Secondary metal production plants;
- (t) Chemical process plants;
- (u) Fossil-fuel boilers, ~~[or combination of fossil-fuel boilers,]~~ totaling more than 250 million BTUs per hour heat input;
- (v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (w) Taconite ore processing plants;
- (x) Glass fiber processing plants;
- (y) Charcoal production plants;
- (z) Fossil fuel-fired steam electric plants of more than 250 million BTUs per hour heat input; or
- (aa) Another stationary source category which, as of August 7, 1980, is being regulated under 42 U.S.C. 7411 or 7412 ~~[Title 401, Chapters 57 and 59, or 40 CFR Parts 60 and 61]~~.

Section 3[4]. Sources Locating in Designated Attainment or

Unclassifiable Areas that will cause or contribute to a violation of a National Ambient Air Quality Standard. (1) This section shall apply only to a new major stationary source[s] or a new major modification[s] that ~~[which]~~ will locate in designated attainment or unclassifiable areas, pursuant to 42 U.S.C. [USC] 7407(d)(1)(A)(ii) or (iii), if the source or modification will ~~[would]~~ cause impacts that ~~[which]~~ exceed the significance levels, as listed in the table in this subsection, at a locality that does not or will not meet the national ambient air quality standards.

<u>Pollutant</u>	<u>Annual Average</u>	<u>Averaging Time</u>			
		<u>24-Hour</u>	<u>8-Hour</u>	<u>3-Hour</u>	<u>1-Hour</u>
<u>Sulfur Dioxide</u>	<u>1.0 mg/m³</u>	<u>5 mg/m³</u>	<u>==</u>	<u>25 mg/m³</u>	<u>==</u>
<u>PM₁₀</u>	<u>1.0 mg/m³</u>	<u>5 mg/m³</u>	<u>==</u>	<u>==</u>	<u>==</u>
<u>Nitrogen Dioxide</u>	<u>1.0 mg/m³</u>	<u>==</u>	<u>==</u>	<u>==</u>	<u>==</u>
<u>Carbon Monoxide</u>	<u>==</u>	<u>==</u>	<u>0.5 mg/m³</u>	<u>==</u>	<u>2 mg/m³</u>

~~[specified in Section 13 of this administrative regulation at a locality that does not or would not meet the national ambient air quality standards.]~~

(2) Sources to which this section applies shall meet the requirements in Section 4(1) ~~[5(1)]~~, (2) and (4) of this administrative regulation and ~~[. However, the sources]~~ may be exempt from Section 4(3)~~[5(3)]~~ of this administrative regulation.

(3) For sources of sulfur dioxide (SO₂), particulate matter, and carbon monoxide (CO), the determination that ~~[of whether]~~ a new major source or major modification will cause or contribute to a violation of a national ambient air quality

standard shall be made on a case-by-case basis using the source's allowable emissions in an approved atmospheric simulation model listed in 40 C.F.R. appendix W, "Guideline on Air Quality Models." ~~[pursuant to 401 KAR 50:040.]~~

(4) For sources of NO_x, the initial determination that ~~[of whether]~~ a new major source or major modification will ~~[would]~~ cause or contribute to a violation of the national ambient air quality standard for nitrogen dioxide (NO₂) shall be made using an approved atmospheric simulation model assuming all the nitric oxide emitted is oxidized to NO₂ by the time the plume reaches ground level. The initial concentration estimates may be adjusted if adequate data are available to account for the expected oxidation rate.

(5) For ozone, sources of VOCs locating outside a designated ozone nonattainment area shall be presumed to have no significant impact on the designated nonattainment area. If ambient monitoring indicates that the area of source location is in fact nonattainment, ~~[then]~~ the source shall be permitted under the applicable provisions of this administrative regulation and 401 KAR 52:020 until the area is designated nonattainment pursuant to 42 U.S.C. [USC] 7407(d)(1)(A)(i).

(6) The determination that ~~[as to whether]~~ a new major source or major modification will ~~[would]~~ cause or contribute to a violation of a national ambient air quality standard shall be made as of the start-up date.

(7) Applications for major new sources and major modifications locating in attainment or unclassifiable areas, the operation of which will ~~[would]~~ cause a new violation of a national ambient air quality standard but will ~~[would]~~ not contribute to an existing violation, may be approved only if the following conditions are met:

(a) The new source shall ~~[is required to]~~:

1. Meet an emissions ~~[emission]~~ limitation; ~~[7]~~

2. Meet a ~~[or a]~~ design, operational or equipment standard; ~~[7]~~ or

3. Control existing sources ~~[are controlled]~~ so that the new source will not cause a violation of a national ambient air quality standard.

(b) The new emissions ~~[emission]~~ limitations for the new and existing sources affected shall be state and federally enforceable in accordance with Section 6 ~~[7]~~ of this administrative regulation.

Section 4~~[5]~~. Sources Locating in a Designated Nonattainment Area
[Conditions for Approval]. This section shall apply to a new major stationary source[s] or major modification[s] that will ~~[which would]~~ be constructed in an area designated as nonattainment pursuant to 42 U.S.C. ~~[USC]~~ 7407(d)(1)(A)(i) for a pollutant for which the stationary source or modification is major. Approval to construct may be granted only if the ~~[following]~~ conditions of this section are met. ~~[7]~~

(1) The new major source or major modification shall be required to meet an emissions ~~[emission]~~ limitation that ~~[which]~~ specifies the lowest achievable emissions ~~[emission]~~ rate (LAER) for the source.

(2) The applicant shall demonstrate that all existing major sources owned or operated by the applicant, ~~[f]~~ or an entity controlling, controlled by, or under common control with the applicant, ~~[y]~~ in the Commonwealth of Kentucky ~~[(Commonwealth)]~~ are in compliance with all applicable emissions ~~[emission]~~ limitations and standards specified in Title 401, Chapters 50 to 63, and 40 C.F.R. ~~[CFR]~~ Parts 60 and 61 and 42 U.S.C. ~~[USC]~~ 7401 to 7626, or are in compliance with an expeditious state and

1 federally enforceable compliance schedule or a court decree establishing a compliance
2 schedule.

3 (3)(a) Except for ~~[in the case of]~~ VOCs or NOx emissions, emissions from
4 existing sources in the affected area of the proposed new major source or modification,
5 ~~[{}~~ whether or not under the same ownership, ~~{}~~ shall be reduced, ~~[{offset}]~~, so that
6 there will be reasonable further progress toward attainment of the applicable national
7 ambient air quality standard (NAAQS). Only those transactions in which the emissions
8 being offset are from the same criteria pollutant category shall be accepted.

9 (b) The ratio of total emissions ~~[emission]~~ reductions of VOCs or NOx to total
10 increased emissions of the same air pollutant shall be at least the ratio indicated for the
11 following ozone nonattainment area classifications:

- 12 1. For marginal nonattainment areas, at least 1.1 to 1;
- 13 2. For moderate nonattainment areas, at least 1.15 to 1;
- 14 3. For serious nonattainment areas, at least 1.2 to 1;
- 15 4. For severe nonattainment areas, at least 1.3 to 1;
- 16 5. For extreme nonattainment areas, at least 1.5 to 1.

17 (4) The emissions ~~[emission]~~ reductions shall provide a positive net air
18 quality benefit in the affected area.

19 (a) Atmospheric simulation modeling shall not be required for VOCs and NO_x.

20 (b) Except as provided in Section 3(5) ~~[4(5)]~~ of this administrative regulation,
21 compliance with subsection (3) of this section and Section 5(3)(e) ~~[6(7)]~~ of this
22 administrative regulation shall be adequate to meet this condition.

23 (5) ~~[For a major stationary source or major modification locating in an area~~

1 ~~designated nonattainment with respect to that pollutant for which the proposed source~~
2 ~~or modification is major, Permits issued under this administrative regulation shall~~
3 ~~specify that construction shall not commence until the U.S. EPA has approved the~~
4 ~~cabinet's plan relating to the requirements of Part D, Title I, of 42 USC 7401-7626].~~

5 [(6)] The proposed major stationary source or major modification shall include
6 in the application for a construction permit an analysis of the alternative sites, sizes,
7 production processes, and environmental control techniques for the proposed source,
8 which demonstrates that benefits of the proposed source significantly outweigh the
9 environmental and social costs imposed as a result of its location, construction, or
10 modification.

11 **Section 5[6]. [Baseline—for] Determining Credit for Emissions**
12 **[Emission] Offsets.** (1) The baseline for determining credit for emissions
13 ~~[emission]~~ reductions or offsets shall be:

14 (a) The emissions ~~[emission]~~ limitations in effect at the time the application to
15 construct or modify a source is filed; or [-]

16 (b) The actual emissions of the source from which offset credit is attained if:

17 1. The demonstration of reasonable further progress and attainment of
18 ambient air quality standards for the SIP was based on actual emissions; or

19 2. The SIP does not contain an emissions limitation for that source or source
20 category.

21 (c) Baseline actual emissions as defined in 401 KAR 51:001, Section 1(20),
22 shall not be used for determining the baseline for emissions offsets. [(For areas where
23 ~~the demonstration of attainment for the State Implementation Plan was based on actual~~

emissions, the baseline for determining offset credit shall be actual emissions. Credit for emissions offset purposes may be allowed for existing control that goes beyond that required by regulations. Offset calculations shall be made on a pound per hour basis when all facilities involved in the emission offset calculations are operating at their maximum expected or allowed production rate. Offsets may be calculated on a tons per year basis if baseline emissions for existing sources providing the offsets are calculated using the actual annual operating hours for the previous two (2) year period. If the cabinet requires certain hardware controls in lieu of an emission limitation, baseline allowable emissions shall be based on actual operating conditions for the previous two (2) year period in conjunction with the required hardware controls.]

[(1) — No applicable emission limitation. If the requirements of the cabinet do] not contain an emission limitation for a source or source category, the emission offset baseline involving the source shall be actual emissions determined under actual operating conditions for the previous two (2) year period. If the emission limitations required by the cabinet allow greater emissions than the uncontrolled emission rate of the source, emission offset credit shall be allowed only for control below the uncontrolled emission rate.]

(2) Credit for emissions offsets. Credit for emissions offset may be allowed for existing control that goes beyond the control required under 401 KAR Chapters 50 to 68 and existing federal regulations. [Combustion of fuels. The emissions for determining offset credit involving an existing fuel combustion source shall be the allowable emissions under the emission limitation requirements of the cabinet for the type of fuel being burned at the time the new major source or major modification

~~application is filed. If the existing source has switched to a different type of fuel at some earlier date, a resulting emission reduction, (either actual or allowable) shall not be used for emission offset credit. If the existing source commits to switch to a cleaner fuel at some future date, emission offset credit based on the allowable emissions for the fuels involved shall not be acceptable unless the permit is conditioned to require the use of a specified alternative control measure which would achieve the same degree of emission reduction if the source switches back to a dirtier fuel at some later date.]~~

(3) General provisions for calculating offset values.

(a) Offset calculations shall be made on a pound per hour basis if all facilities involved in the emissions offset calculations are operating at their maximum or allowed production rate.

(b) Offsets may be calculated on a tons per year basis if baseline emissions for existing sources providing the offsets are calculated using the actual annual operating hours for the previous two (2) year period.

(c) If the cabinet requires certain hardware controls instead of an emissions limitation, baseline allowable emissions shall be based on actual operating conditions for the previous two (2) year period in conjunction with the required hardware controls.

(d) If the emissions limitations required by the cabinet allow greater emissions than the uncontrolled emissions rate of the source, emissions offset credit shall be allowed only for control below the uncontrolled emissions rate.

(e) The owner or operator of a new or modified major stationary source shall comply with any offset requirement in effect under this administrative regulation to

1 increase emissions of an air pollutant by:

2 1. Obtaining emissions reductions of the air pollutant from the same source
3 or other sources in the same nonattainment area; or

4 2. From sources in another nonattainment area if:

5 a. The other area has an equal or higher nonattainment classification than
6 the area in which the source is located; and

7 b. Emissions from the other area contribute to a violation of the national
8 ambient air quality standard in the nonattainment area in which the source is located.

9 ~~[Operating hours and source shutdown. A source may be credited with emission~~
10 ~~reductions achieved by shutting down an existing source or permanently curtailing~~
11 ~~production or operating hours below baseline levels if the work force to be affected has~~
12 ~~been notified in writing of the proposed shutdown or curtailment. Source shutdowns~~
13 ~~and curtailments in production or operating hours occurring prior to the date the new~~
14 ~~source application is filed shall not be used for emission offset credit. However, where~~
15 ~~an applicant can establish that it shut down or curtailed production after August 7,~~
16 ~~1977, or less than one (1) year prior to the date of permit application, whichever is~~
17 ~~earlier, and the proposed new source is a replacement for the shutdown or curtailment,~~
18 ~~credit for such shutdown or curtailment may be applied to offset emissions from the~~
19 ~~new source.]~~

20 (4) Calculating offsets if no applicable emissions limitation exists. If the
21 Kentucky SIP does not contain an emissions limitation for a source or source category,
22 the emissions offset baseline involving the source shall be actual emissions determined
23 under actual operating conditions for the previous two (2) year period. ~~[Credit for~~

1 ~~hydrocarbon substitution. No emission offset credit shall be allowed for replacing one~~
2 ~~[(1)] volatile organic compound with another of lesser photochemical reactivity, unless~~
3 ~~the replacement compound is methane, ethane, 1,1,1-trichloroethane or~~
4 ~~trichlorofluoroethane.]~~

5 (5) Calculating offsets for existing fuel combustion sources.

6 (a) The emissions for determining emissions offset credit involving an
7 existing fuel combustion source shall be the allowable emissions under the emissions
8 limitation requirements of the cabinet for the type of fuel being burned at the time the
9 new major source or major modification application is filed.

10 (b) If the existing source has switched to a different type of fuel at some
11 earlier date, a resulting emissions reduction, either actual or allowable, shall not be
12 used for emissions offset credit.

13 (c) If the existing source commits to switch to a cleaner fuel at some future
14 date, emissions offset credit based on the allowable emissions for the fuels involved
15 shall not be allowed unless the permit is conditioned to require the use of a specified
16 alternative control measure that will achieve the same degree of emissions reduction if
17 the source switches back to a dirtier fuel at some later date. [Banking of [emission]
18 offset credit. New sources obtaining permits by applying offsets after the effective date
19 of this administrative regulation may bank offsets that exceed the requirements of
20 Section 5(3) of this administrative regulation. An owner or operator of an existing
21 source that reduces its own emissions may bank a resulting reduction beyond those
22 required by regulation for use under this administrative regulation, even if the offsets
23 are applied immediately to a new source permit. These Banked emissions offsets may

1 ~~be used under the preconstruction review program required in 42 USC 7401-7626, as~~
2 ~~long as these banked emissions are identified and accounted for in the~~
3 ~~Commonwealth's control strategy.]~~

4 (6) Calculating offsets for operating hours and source shutdowns.

5 (a) A source may be credited with emissions reductions achieved by shutting
6 down an existing source or permanently curtailing production or operating hours below
7 baseline levels if the work force to be affected has been notified in writing of the
8 proposed shutdown or curtailment.

9 (b) Source shutdowns and curtailments in production or operating hours
10 occurring prior to the date the new source application is filed shall not be used for
11 emissions offset credit.

12 (c) If an applicant can establish that it shut down or curtailed production after
13 August 7, 1977, or less than one (1) year prior to the date of permit application,
14 whichever is earlier, and the proposed new source is a replacement for the shutdown or
15 curtailment, credit for such shutdown or curtailment may be applied to offset emissions
16 from the new source. ~~[Offset credit for meeting NSPS or NESHAPS. If a source is~~
17 ~~subject to an emission limitation established in a New Source Performance Standard~~
18 ~~(NSPS) or a National Emission Standard for Hazardous Air Pollutants (NESHAPS) in~~
19 ~~compliance with Title 401, Chapters 59 and 57 respectively, and a different emission~~
20 ~~limitation is required by the cabinet, the more stringent limitation shall be used as the~~
21 ~~baseline for determining credit for emission offsets.~~

22 ~~(b) The difference in emissions between NSPS or NESHAPS and other~~
23 ~~emission limitations may not be used as offset credit.]~~

1 (7) Calculating offsets for hydrocarbon substitution. An emissions offset
2 credit shall be allowed for replacing one volatile organic compound with another of
3 lesser photochemical reactivity, unless the replacement compound is methane, ethane,
4 1,1,1-trichloroethane or trichlorofluoroethane. ~~[Offsets. The owner or operator of a new~~
5 ~~or modified major stationary source shall comply with any offset requirement in effect~~
6 ~~under this section for increased emissions of an air pollutant only by obtaining emission~~
7 ~~reductions of the air pollutant from the same source or other sources in the same~~
8 ~~nonattainment area, except that the cabinet may allow the owner or operator of a~~
9 ~~source to obtain the emission reductions in another nonattainment area if:~~

10 ~~(a) The other area has an equal or higher nonattainment classification than the~~
11 ~~area in which the source is located; and~~

12 ~~(b) Emissions from the other area contribute to a violation of the national~~
13 ~~ambient air quality standard in the nonattainment area in which the source is located.]~~

14 (8) Banking of emissions offset credit.

15 (a) New sources obtaining permits by applying offsets after the effective date
16 of this administrative regulation may bank offsets that exceed the requirements of
17 Section 5(3) of this administrative regulation.

18 (b) An owner or operator of an existing source that reduces its own emissions
19 may bank a resulting reduction beyond those required by regulation for use under this
20 administrative regulation, even if the offsets are applied immediately to a new source
21 permit.

22 (c) Banked emissions offsets may be used under the preconstruction review
23 program required in 42 U.S.C. 7401 to 7626, as long as these banked emissions are

1 identified and accounted for in Kentucky's control strategy.

2 (9) Offset credit for meeting NSPS or NESHAPS.

3 (a) If a source is subject to an emissions limitation established in a New
4 Source Performance Standard (NSPS) or a National Emissions Standard for
5 Hazardous Air Pollutants (NESHAPS) and a different emissions limitation is required by
6 the cabinet, the more stringent limitation shall be used as the baseline for determining
7 credit for emissions offsets.

8 (b) The difference in emissions between NSPS or NESHAPS and other
9 emissions limitations may not be used as offset credit.

10 **Section 6[7]. Administrative Procedures for Emissions Offsets.** [The
11 ~~necessary emission offsets may be proposed [either] by the owner of the proposed~~
12 ~~source or by the cabinet.~~]

13 (1) [The] Emission reductions shall be enforceable by the cabinet and the
14 U.S. EPA, and shall be accomplished by the start-up date of the new source.

15 (a) If emissions [emission] reductions are to be obtained in a state that
16 neighbors the Commonwealth for a new source to be located in the Commonwealth, the
17 emissions [emission] reductions shall be enforceable by the neighboring state or local
18 agencies and the U.S. EPA.

19 (b) The necessary emissions offsets may be proposed by the owner of the
20 proposed source or by the cabinet.

21 (2)[(1)] Source initiated emissions [emission] offsets.

22 (a) The owner or operator of a source may propose:

23 1. Internal emissions [emission] offsets, which involve reductions from

sources controlled by the owner [~~(internal emission offsets) or~~]; or

2. External emissions offsets, which involve reductions from other sources [~~(external emission offsets)~~], if the emissions [emission] offsets meet the requirements of this section and Section 4(3)[~~5(3)~~] of this administrative regulation.

(b) An internal emissions [emission] offset shall be included and made enforceable [~~by inclusion~~] as a condition of the source's [~~new source~~] permit.

(c) An external emissions [emission] offset shall only [~~not~~] be accepted if [~~unless~~] the cabinet requires the affected source to comply with [~~is subject to~~] a new emissions [emission] limitation [~~requirement of the cabinet~~] to ensure that its emissions shall be reduced by a specified amount in a specified time; and [~~-. The form of~~] the new emissions [emission] limitation shall be enforceable by the cabinet and [~~by~~] the U.S. EPA.

(3)[~~(2)~~] Cabinet initiated emissions [emission] offsets.

(a) The cabinet may commit to reducing emissions from mobile sources and other existing sources [~~(including mobile sources)~~] to provide a net air quality benefit in the impact area of a [~~the~~] proposed new source to accommodate the proposed new source.

(b) This emissions reduction [~~The~~] commitment shall be reflected in the emissions [emission] limitation requirements [~~of the cabinet~~] for the new and existing sources as required by this section.

Section 7[8]. Source Obligation. (1) An owner or operator of a source or modification subject to this administrative regulation shall construct and operate the source or modification in accordance with the application submitted to the cabinet

1 under this administrative regulation and 401 KAR 52:020 or under the terms of an
2 approval to construct. ~~[who constructs or operates an applicable source or modification~~
3 ~~not in accordance with the application submitted pursuant to Sections 4 and 5 of this~~
4 ~~administrative regulation or with the terms of an approval to construct or an owner or~~
5 ~~operator of a source or modification subject to this administrative regulation who begins~~
6 ~~actual construction after September 22, 1982 without applying for and receiving~~
7 ~~approval according to the requirements of this section shall be subject to appropriate~~
8 ~~enforcement action.]~~

9 (2)(a) Approval to construct shall become invalid if construction:

10 1. Is not commenced within eighteen (18) months after receipt of the
11 approval; ~~[, or if construction]~~

12 2. Is discontinued for a period of eighteen (18) months or more; or ~~[, or if~~
13 ~~construction]~~

14 3. Is not completed within a reasonable time.

15 (b) The cabinet may extend the eighteen (18) month period upon a
16 satisfactory showing that an extension is justified.

17 1. An extension shall not apply to the time period between construction of
18 the approved phases of a phased construction project; and

19 2. Each phase shall commence construction within eighteen (18) months of
20 the projected and approved commencement date.

21 (3) Approval to construct shall not relieve an owner or operator of the
22 responsibility to comply fully with applicable provisions of ~~[Title 401,]~~ 401 KAR
23 Chapters 50 to 63 and any other requirements under local, state, or federal law.

(4) ~~If [At the time that]~~ a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in an ~~[a state and federally]~~ enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, ~~[such as a restriction on hours of operation, then]~~ the requirements of this administrative regulation shall apply to the source or modification as though construction had not yet commenced on the source or modification.

(5)(a) The provisions of this subsection shall apply to projects at existing emissions units at a major stationary source other than projects at a Clean Unit or at a source with a PAL, if:

1. There is a reasonable possibility that a project that is not part of a major modification may result in a significant emissions increase; and

2. The owner or operator uses the method specified in 401 KAR 51:001, Section 1(202)(b) to calculate projected actual emissions.

(b) Before beginning actual construction of a project specified in paragraph (a) of this subsection, the owner or operator shall document and maintain a record of the following information:

1. A description of the project;

2. Identification of the emissions units for which emissions of a regulated NSR pollutant may be affected by the project; and

3. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

a. Baseline actual emissions;

1 **b.** Projected actual emissions;

2 **c.** Amount of emissions excluded in calculating projected actual emissions

3 and an explanation for why that amount was excluded; and

4 **d.** Any applicable netting calculations.

5 **(c)** For a project specified in paragraph (a) of this subsection, the owner or
6 operator shall:

7 **1.** Monitor the emissions of any regulated NSR pollutant that could increase
8 as a result of the project and that are emitted by an emissions unit identified in
9 paragraph (a)2 of this subsection; and

10 **2.** Calculate and maintain a record of the annual emissions, in tons per year on

11 **a**
12 calendar year basis, for:

13 **a.** Five (5) years following resumption of regular operations after the
14 change; or

15 **b.** Ten (10) years if the project increases the design capacity of or potential
16 to emit for that regulated NSR pollutant at the emissions unit.

17 **(d)** If the unit is an existing EUSGU, before beginning actual construction, the
18 owner or operator:

19 **1.** Shall provide a copy of the information in paragraph (b) of this subsection
20 to the cabinet; and

21 **2.** Shall not be required to obtain a determination from the cabinet before
22 beginning actual construction; and

23 **3.** Shall submit a report to the cabinet within sixty (60) days after the end of

each year during which records are required to be generated under paragraph (b) of this subsection that contains the unit's annual emissions during the calendar year preceding report submittal.

(e)1. For an existing unit other than an EUSGU, the owner or operator shall submit a report to the cabinet if:

a. The annual emissions, in tons per year, from a project identified in paragraph (a) of this subsection exceed the baseline actual emissions, as documented and maintained pursuant to paragraph (b)3 of this subsection, by a significant amount for that regulated NSR pollutant; and

b. The emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph (b)3 of this subsection.

2. The report shall be submitted to the cabinet within sixty (60) days after the end of the year during which records are required to be generated under paragraph (b) of this subsection and shall contain the following:

a. The name, address, and telephone number of the major stationary source;

b. The annual emissions as calculated pursuant to paragraph (c) of this subsection; and

c. Any other information that the owner or operator wishes to include in the report.

(f) The owner or operator of the source shall make the information required to be documented and maintained under this subsection available for review upon request for inspection by the cabinet or the general public pursuant to 401 KAR 52:100.

1 **Section 8[9]. Permit Condition Rescission.** (1) An owner or operator holding

2 a permit for a stationary source or modification which was issued pursuant to 401 KAR
3 51:050 or 401 KAR 51:051E may request that the cabinet rescind the applicable
4 ~~[permit]~~ conditions.

5 (2) The cabinet shall rescind a permit condition if ~~[so]~~ requested and ~~[if]~~ the
6 applicant ~~[can]~~ demonstrates to the satisfaction of the cabinet that this administrative
7 regulation does not apply to the source or modification or to a portion of the source or
8 modification ~~[thereof]~~ if construction will ~~[would]~~ have commenced after September 22,
9 1982, and if the owner or operator demonstrates that the rescission will ~~[would]~~ not
10 violate the requirements of Sections 4(3) and 7 ~~[5(3) and 8]~~ of this administrative
11 regulation.

12 **Section 9[10]. Class I Areas.** (1) The following areas which were in existence

13 on August 7, 1977, shall be Class I areas and shall not be redesignated:

14 (a) International parks;

15 (b) National wilderness areas and national memorial parks which exceed
16 5,000 acres in size; and

17 (c) National parks that ~~[which]~~ exceed 6,000 acres in size.

18 (2) Any other ~~[Another]~~ area, unless otherwise specified in the legislation
19 creating the area, is designated Class II but may be redesignated as provided in 40
20 C.F.R. [CFR] 51.166(g) ~~[, as published in the Code of Federal Regulations, Title 40,~~
21 ~~July 1, 1991].~~

22 (3) The visibility protection requirements of ~~[this section and Section 11 of]~~
23 this administrative regulation shall apply only to sources that ~~[which]~~ may impact a

mandatory Class I federal area.

(4) The following areas may be redesignated only as Class I or II:

(a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and

(b) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

Section 10[44]. Protection of Visibility. (1) New source review - applicability and exemptions.

(a) A ~~[No]~~ stationary source or modification to which this section applies shall not begin actual construction without a permit that ~~[which]~~ states ~~[that]~~ the stationary source or modification shall meet the requirements of this section ~~[would meet those requirements]~~.

(b) This section shall apply to construction of a new major stationary source or major modification that will ~~[would both]~~ be constructed in an area designated as nonattainment under 42 U.S.C. ~~[USC]~~ 7407(d)(1)(A)(i) and potentially have an impact on visibility in a Class I area.

(c) This section shall apply to a major stationary source or major modification for each pollutant subject to regulation under ~~[the]~~ 42 U.S.C. ~~[USC]~~ 7401to ~~[-]~~7626 that it will ~~[would]~~ emit, except as provided in paragraphs (d) and (e) of this subsection.

(d) This section shall not apply to a particular major stationary source or major modification if:

1 1. The source or modification is ~~[would be]~~ a nonprofit health or nonprofit
2 educational institution, or a major modification will ~~[would]~~ occur at the institution, and
3 the Governor of the Commonwealth requests that it be exempt from the ~~[these]~~
4 requirements of this section; and [-]

5 2. The source is a portable stationary source that ~~[which]~~ has previously
6 received a permit under this section and will be temporarily relocated; and:

7 a. ~~The owner or operator proposes to relocate the source and emissions of~~
8 ~~the source at the new location would be temporary;~~ ~~[b.]~~ The emissions from the
9 source will ~~[would]~~ not exceed the ~~[its]~~ allowable emissions;

10 b.[c.] The emissions from the source will ~~[would]~~ not impact a ~~[a]~~ Class I area
11 or an ~~[and a]~~ area where an applicable increment is known to be violated; and

12 c.[d.] Reasonable notice is given to the cabinet prior to the relocation,
13 identifying the proposed new location and the probable duration of operation at the new
14 location. The notice shall be given to the cabinet not less than ten (10) days in advance
15 of the proposed relocation unless a different time duration is previously approved by
16 the cabinet.

17 (e) This section shall not apply to a major stationary source or major
18 modification with respect to a particular pollutant, if the allowable emissions of that
19 pollutant from the source, or the net emissions increase of that pollutant from the
20 modification:

21 1. Will ~~[Would]~~ not impact a ~~[a]~~ Class I area;

22 2. Will not impact an ~~[and a]~~ area where an applicable increment is known
23 to be violated; and

1 3.[2:] Will ~~[Would]~~ be temporary.

2 (2) Visibility impact analyses. The owner or operator of a source shall provide
3 an analysis of the impairment to visibility that will ~~[would]~~ occur in a Class I area as a
4 result of the source or modification and general commercial, residential, industrial and
5 other growth associated with the source or modification.

6 (3) Federal land manager notification.

7 (a) The federal land manager and the federal official charged with direct
8 responsibility for management of Class I areas have an affirmative responsibility to
9 protect the visibility and other air quality related values ~~[(including visibility)]~~ of the
10 Class I lands and to consider, in consultation with the cabinet, if ~~[whether]~~ a proposed
11 source or modification will have an adverse impact on these values.

12 (b) The cabinet shall provide written notification to all affected federal land
13 managers and to the federal official charged with direct responsibility for management
14 of lands within the Class I area of a permit application or an advanced notice of a
15 permit application for a proposed new major stationary source or major modification
16 that may affect visibility in a Class I area. ~~[The cabinet shall also provide the~~
17 ~~notification to the federal official charged with direct responsibility for management of~~
18 ~~lands within the Class I area.]~~ The notification shall:

19 1. Include a copy of all information relevant to the permit application;

20 2. ~~[and shall]~~ Be submitted pursuant to paragraph (b) of this subsection
21 ~~[given]~~ within thirty (30) days of receipt of the permit application or advanced notice of
22 permit application and at least sixty (60) days prior to a public hearing on the
23 application for a permit to construct; and ~~[-The notification shall]~~

1 3. Include an analysis of the proposed source's anticipated impacts on
2 visibility in a Class I area. ~~[The cabinet shall also notify all affected federal land~~
3 ~~managers within thirty (30) days of receipt of an advance notification of the permit~~
4 ~~application.]~~

5 (c)1. The cabinet shall consider an analysis ~~[performed]~~ by the federal land
6 manager, provided within thirty (30) days of the notification and analysis required by
7 paragraph (b) of this subsection, that the proposed new major stationary source or
8 major modification may have an adverse impact on visibility in a Class I area.

9 2. If the cabinet finds that the analysis does not demonstrate, to the
10 satisfaction of the cabinet, that an adverse impact on visibility will result in the Class I
11 area, the cabinet shall, in the public hearing notice required in 401 KAR 52:100, either
12 explain that decision or give notice as to where the explanation can be obtained.

13 (d) Adverse impact on visibility as it applies to paragraph (c) of this
14 subsection shall be determined on a case-by-case basis, taking into account the
15 geographic extent, intensity, duration, frequency, and time of visibility impairments, and
16 how these factors correlate with the times of visitor use of the Class I area, and the
17 frequency and time of natural conditions that reduce visibility.

18 (4) Public participation. The cabinet shall follow the applicable procedures of
19 401 KAR 52:100 in processing applications under this section. The cabinet shall follow
20 the procedures at 40 C.F.R. ~~[CFR]~~ 52.21(r) as in effect on July 1, 2003 ~~[August 7,~~
21 ~~1980]~~, to the extent that the procedures of 401 KAR 52:100 do not apply.

22 (5) National visibility goal.

23 (a) The cabinet shall only issue permits to those sources for which ~~[whose]~~

emissions will be consistent with making reasonable progress toward the national goal of preventing future, and remedying existing, impairment of visibility in Class I areas which impairment results from manmade air pollution.

(b) In making the decision to issue a permit, the cabinet may take into account the overriding factors of:

1. The cost of compliance;

2. The time necessary for compliance;

3. The energy and nonair quality environmental impacts of compliance;

and

4. The useful life of the source.

(6) Monitoring.

(a) The cabinet may require monitoring of visibility in a Class I area near the proposed new stationary source or major modification using human observations, teleradiometers, photographic cameras, nephelometers, fine particulate monitors, or other appropriate methods as specified by the U.S. EPA.

(b) The monitoring method selected shall be determined on a case-by-case basis by the cabinet.

(c) The cabinet shall not undertake visibility monitoring in a Class I area without the approval of the federal land manager.

(d) Data obtained from visibility monitoring shall be made available to the cabinet, the federal land manager, and the U.S. EPA, upon request.

Section 11. Clean Unit Test for Emissions Units that are Subject to LAER.

For any emissions unit that is subject to LAER and for which the cabinet has issued a

major NSR permit in the past ten (10) years, an owner or operator of a major stationary source may use the Clean Unit test provisions specified in this section to determine if an emissions increase at a Clean Unit is part of a project that is a major modification.

(1) General Provisions for Clean Units.

(a) The cabinet shall make a separate Clean Unit designation for each pollutant emitted by an emissions unit for which the emissions unit qualifies as a Clean Unit.

(b) A project for which the owner or operator begins actual construction shall be considered to have occurred while the emissions unit is a Clean Unit, if actual construction begins:

1. After the effective date of the Clean Unit designation as determined according to subsection (3) of this section; and

2. Before the expiration date of the Clean Unit designation as determined according to subsection (4) of this section.

(c) For an emissions unit to retain its Clean Unit designation during a project at a Clean Unit, the project shall not:

1. Cause the need for a change in the emissions limitations or work practice requirements adopted in conjunction with LAER in the permit for the unit; or,

2. Alter any physical or operational characteristics that formed the basis for the LAER determination as specified in subsection (5)(d) of this section.

(d) Unless an emissions unit re-qualifies as a Clean Unit according to subsection (2)(b) of this section, the unit shall lose its designation as a Clean Unit upon issuance of the necessary permit revisions if:

1 1. The project causes the need for a change in the emissions limitations or
2 work practice requirements that were determined in conjunction with LAER in the permit
3 for the unit; or

4 2. The project will alter any physical or operational characteristics that
5 formed the basis for the LAER determination as specified in subsection (5)(d) of this
6 section.

7 (e) Clean Unit designation shall end immediately before the time actual
8 construction begins on a project that will cause a unit to lose its Clean Unit designation
9 if the owner or operator begins actual construction on a project before applying for a
10 permit revision.

11 (f) A project that causes an emissions unit to lose its Clean Unit designation
12 shall be subject to the applicability requirements of Section 1(2)(a)1, 2, and 4 and (2)(b)
13 of this administrative regulation as if the emissions unit is not a Clean Unit.

14 (g)1. For emissions units with PSD permits, the BACT level of emissions
15 reductions or work practice requirements shall satisfy the requirement for meeting
16 LAER in subsection (3) to (8) of this section if:

17 a. The emissions unit has received a PSD permit that complies with BACT
18 within the last ten (10) years; and,

19 b. The emissions unit is located in an area that was redesignated as
20 nonattainment for the relevant pollutant after the PSD permit is issued and before the
21 SIP including the Clean Unit provisions become effective.

22 2. For these emissions units, the requirements for the LAER determination
23 made under subsection (1)(c) of this section shall apply to the BACT permit terms and

1 conditions.

2 3. The requirements of subsection (6)(a)3 of this section shall not apply to
3 emissions units that qualify for Clean Unit status according to this paragraph.

4 (2) Qualifying or re-qualifying to use the Clean Unit Applicability test.

5 (a) An emissions unit shall automatically qualify as a Clean Unit if the unit
6 meets the requirements in this paragraph.

7 1. Permitting requirement. The owner or operator of an emissions unit shall
8 have received a major NSR permit within the past ten (10) years and shall maintain and
9 provide information upon request by the cabinet or U.S. EPA to demonstrate that this
10 permitting requirement is met.

11 2. Qualifying air pollution control technologies requirement. Air pollutant
12 emissions from the emissions unit shall be reduced through the use of air pollution
13 control technology, including pollution prevention or work practices, that meets the
14 following requirements:

15 a. The control technology shall achieve the LAER level of emissions
16 reductions determined by issuance of a major NSR permit within the past ten (10)
17 years;

18 b. The emissions unit shall not be eligible for the Clean Unit designation if
19 the LAER determination did not result in a requirement to reduce emissions below the
20 level of a standard, uncontrolled, new emissions unit of the same type; and

21 c. The owner or operator shall make an investment to install the control
22 technology. An investment includes expenses to research the application of, or to
23 actually apply, a pollution prevention technique to the emissions unit.

1 (b) Re-qualifying for the Clean Unit designation. After the original Clean Unit
2 designation expires or is lost, an emissions unit may re-qualify as a Clean Unit under
3 the provisions of this paragraph or under Section 12 of this administrative regulation.

4 1. An owner or operator shall obtain a new major NSR permit or permit
5 revision, as applicable, issued pursuant to 401 KAR 52:020 for an emissions unit that is
6 re-qualifying for Clean Unit designation.

7 2. The permit shall require compliance with the current-day LAER, and the
8 emissions unit shall meet the requirements in subsection (3)(a) of this section.

9 (3) Effective date of the Clean Unit designation. The date that the owner or
10 operator may begin to use the Clean Unit test to determine if a project involving an
11 emissions unit is a major modification shall be determined according to paragraph (a)
12 or (b) of this subsection, as applicable.

13 (a) The effective date for an original Clean Unit designation and for an
14 emissions unit that re-qualifies as a Clean Unit by implementing a new control
15 technology to meet current-day LAER shall be:

16 1. The earlier of the date the emissions unit's air pollution control technology
17 is placed into service or three (3) years after the date the major NSR permit or permit
18 revision is issued; and

19 2. No sooner than the date that provisions for Clean Units become effective
20 in the Kentucky SIP.

21 (b) The effective date for emissions units that re-qualify for the Clean Unit
22 designation using an existing control technology shall be the date the new major NSR
23 permit or permit revision is issued.

1 (4) Clean Unit expiration. The date that the owner or operator shall no longer
2 be allowed to use the Clean Unit test to determine if a project involving an emissions
3 unit is, or is part of, a major modification shall be determined according to paragraph
4 (a) or (b) of this subsection, as applicable.

5 (a) For an emissions unit that automatically qualifies as a Clean Unit under
6 subsection (2)(a) of this section or a unit that re-qualifies by implementing new control
7 technology to meet current-day LAER, the expiration date of the Clean Unit designation
8 shall be:

9 1. Ten (10) years after the effective date or ten (10) years after the date the
10 equipment went into service, whichever is earlier; or,

11 2. At any time the owner or operator fails to comply with the provisions for
12 maintaining the Clean Unit designation pursuant to subsection (6) of this section.

13 (b) The Clean Unit designation for an emissions unit that re-qualifies for the
14 Clean Unit designation using an existing control technology shall expire:

15 1. Ten (10) years after the effective date; or

16 2. At any time the owner or operator fails to comply with the provisions for
17 maintaining the Clean Unit designation in subsection (6) of this section.

18 (5) Required Title V permit content for a Clean Unit. The Title V permit for a
19 major stationary source with a Clean Unit shall, after the effective date of the Clean
20 Unit designation and in accordance with the applicable provisions of 401 KAR Chapter
21 52, but not later than the date the Title V permit is renewed, include the following terms
22 and conditions:

23 (a) A statement indicating that the emissions unit qualifies as a Clean Unit

1 and identifying the pollutant for which this Clean Unit designation applies.

2 (b) The effective date of the Clean Unit designation.

3 1. If the exact effective date is not known on the date the Clean Unit
4 designation is initially recorded in the Title V permit, the permit or permit revision shall
5 describe the event that shall determine the effective date. Once the effective date is
6 determined, the owner or operator shall notify the cabinet of the exact date; and

7 2. If originally absent from the Title V permit, the effective date of the Clean
8 Unit shall be added to the source's Title V permit at the first opportunity the permit is
9 opened, but not later than the next renewal.

10 (c) The expiration date of the Clean Unit designation.

11 1. If the exact expiration date is not known at the date the Clean Unit
12 designation is initially recorded in the Title V permit, the permit shall describe the event
13 that shall determine the expiration date;

14 2. Once the expiration date is determined, the owner or operator shall notify
15 the cabinet of the exact date; and

16 3. If originally absent for the Title V permit, the expiration date shall be
17 added to the source's Title V permit at the first opportunity the permit is opened, but not
18 later than the next renewal.

19 (d) All emissions limitations and work practice requirements adopted in
20 conjunction with LAER and any physical or operational characteristics that formed the
21 basis for the LAER determination.

22 (e) Monitoring, recordkeeping, and reporting requirements as necessary to
23 demonstrate that the emissions unit continues to meet the criteria for maintaining the

1 Clean Unit designation pursuant to subsection (6) of this section.

2 (f) Terms reflecting the owner or operator's duty to maintain the Clean Unit
3 designation and the consequences of failing to do so, pursuant to subsection (6) of this
4 section.

5 (6) Maintaining the Clean Unit designation.

6 (a) The owner or operator of a Clean Unit shall conform to the provisions of
7 this subsection to maintain the Clean Unit designation.

8 1. The Clean Unit shall comply with the emissions limitations or work
9 practice requirements adopted in conjunction with the LAER that are recorded in the
10 major NSR permit and subsequently reflected in the Title V permit;

11 2. The owner or operator shall not make a physical change in or change in
12 the method of operation of the Clean Unit that causes the emissions unit to function in
13 a manner that is inconsistent with the physical or operational characteristics that
14 formed the basis for the LAER determination;

15 3. The Clean Unit shall not emit above a level that has been offset.

16 4. The Clean Unit shall comply with all terms and conditions in the Title V
17 permit related to the unit's Clean Unit designation; and

18 5. The Clean Unit shall continue to control emissions using the specific air
19 pollution control technology that is the basis for its Clean Unit designation. The Clean
20 Unit designation shall end if the emissions unit or control technology is replaced.

21 (b) The requirements of this subsection shall apply to each pollutant for
22 which the cabinet has designated an emissions unit a Clean Unit. Failing to conform to
23 the restrictions for one pollutant shall only affect the Clean Unit designation for that

1 pollutant.

2 (7) Offsets and Netting at Clean Units.

3 (a) Emissions changes that occur at a Clean Unit shall not be included in
4 calculating a significant net emissions increase to be used in a netting analysis or for
5 generating offsets, unless:

6 1. Such use occurs before the effective date of the Clean Unit designation,
7 or after the Clean Unit designation expires; or

8 2. The emissions unit reduces emissions below the level that qualified the
9 unit as a Clean Unit.

10 (b) The owner or operator may generate a credit for the difference between
11 the level that qualified the unit as a Clean Unit and the new emissions limitation, if:

12 1. The unit reduces emissions below the level that qualified the unit as a
13 Clean Unit; and

14 2. The reductions are surplus, quantifiable, and permanent.

15 (c) For generating offsets, reductions shall be federally enforceable.

16 (d) For determining creditable net emissions increases and decreases, the
17 reductions shall also be enforceable as a practical matter.

18 (8) Effect of area redesignation on Clean Units.

19 (a) The Clean Unit designation of an emissions unit shall not be affected by
20 redesignation of the attainment status of the area in which it is located.

21 (b) If an existing Clean Unit designation expires or is lost, the unit shall re-
22 qualify as a Clean Unit according to the requirements currently applicable in the area,
23 regardless of the area's original attainment status during the previous designation

1 period.

2 **Section 12. Clean Unit Provisions for Emissions Units that Achieve an**
3 **Emissions Limitation Comparable to LAER.** For an emissions unit that does not
4 qualify as a Clean Unit under Section 11 of this administrative regulation but is
5 achieving a level of emissions control comparable to LAER, the owner or operator of a
6 major stationary source may use the Clean Unit test provisions specified in this section
7 to determine if an emissions increase at the unit is part of a project that is a major
8 modification.

9 (1) General provisions for Clean Units.

10 (a) The cabinet shall make a separate Clean Unit designation for each
11 pollutant emitted by an emissions unit for which the emissions unit qualifies as a Clean
12 Unit.

13 (b) A project for which the owner or operator begins actual construction shall
14 be considered to have occurred while the emissions unit is a Clean Unit, if actual
15 construction begins:

16 1. After the effective date of the Clean Unit designation as determined
17 pursuant to subsection (4) of this section; and

18 2. Before the expiration date of the Clean Unit designation as determined
19 pursuant to subsection (5) of this section.

20 (c) For an emissions unit to retain its Clean Unit designation during a project
21 at a Clean Unit, the project shall not:

22 1. Cause the need for a change in the emissions limitations or work practice
23 requirements in the permit for the unit that have been determined to be comparable to

1 LAER according to subsection (3) of this section; or

2 2. Alter any physical or operational characteristics that formed the basis for
3 determining that the emissions unit's control technology achieves a level of emissions
4 control comparable to LAER according to subsection (7)(d) of this section.

5 (d) Unless an emissions unit re-qualifies as a Clean Unit according to
6 subsection (2)(b) of this section, the unit shall lose its designation as a Clean Unit upon
7 issuance of the necessary permit revisions, if

8 1. The project causes the need for a change in the emissions limitations or
9 work practice requirements in the permit for the unit that have been determined to be
10 comparable to LAER; or

11 2. The project will alter any physical or operational characteristics that
12 formed the basis for determining that the emissions unit's control technology achieves
13 a level of emissions control comparable to LAER.

14 (e) Clean Unit designation shall end immediately before the time actual
15 construction begins on a project that will cause a unit to lose its Clean Unit designation,
16 if the owner or operator begins actual construction on a project before applying for a
17 permit revision.

18 (f) A project that causes an emissions unit to lose its Clean Unit designation
19 shall be subject to the applicability requirements of Section 1(2)(a)1, 2, and 4 and (2)(b)
20 of this administrative regulation as if the emissions unit is not a Clean Unit.

21 (2) Qualifying or re-qualifying to use the Clean Unit applicability test.

22 (a) An emissions unit shall qualify as a Clean Unit if the unit meets the
23 requirements of this paragraph.

1 1. Qualifying air pollution control technology requirement. Air pollutant
2 emissions from an emissions unit shall be reduced through the use of air pollution
3 control technology, including pollution prevention or work practices, and the owner or
4 operator shall:

5 a. Demonstrate that an emissions unit's control technology is comparable to
6 LAER according to the requirements of subsection (3) of this section;

7 b. Demonstrate that an emissions unit's control technology reduces
8 emissions below the level of a standard, uncontrolled emissions unit of the same type;
9 and

10 c. Make an investment to install the control technology. An investment shall
11 include expenses to research the application of, or to actually apply, a pollution
12 prevention technique to the emissions unit.

13 2. Impact of emissions from the unit requirement. The allowable emissions
14 from the emissions unit, as determined by the cabinet, shall not:

15 a. Cause or contribute to a violation of any national ambient air quality
16 standard or PSD increment; or

17 b. Adversely impact visibility or another air quality related value that has
18 been identified for a federal Class I area by a federal land manager and for which
19 information is available to the general public.

20 3. Date of installation requirement.

21 a. For control technology installed before provisions for Clean Units are
22 effective in the Kentucky SIP, the owner or operator of an emissions unit with control
23 technology on which Clean Unit designation is based, shall apply for Clean Unit

designation within two (2) years after the requirements for Clean Units become effective in the Kentucky SIP.

b. For control technology installed after the provisions for Clean Units become effective in the Kentucky SIP, the owner or operator shall apply for Clean Unit designation at the time the control technology is installed.

(b) Re-qualifying as a Clean Unit. An emissions unit may re-qualify as a Clean Unit after the original Clean Unit designation expires or is lost according to provisions in subsections (6) and (7) of this section or under Clean Unit provisions in Section 11 of this administrative regulation.

1. The owner or operator shall obtain a new permit or permit revision pursuant to subsections (6) and (7) of this section and 401 KAR 52:020 that demonstrates the emissions unit's control technology is achieving a level of emissions control comparable to current-day LAER.

2. The emissions unit shall meet the requirements in subsection (2)(a)1 and 2 of this section.

(3) Demonstrating control effectiveness comparable to LAER. The owner or operator shall demonstrate that the emissions unit's control technology is comparable to LAER under the provisions of either paragraph (a) or (b) of this subsection.

(a) Comparison of the control technology to previous LAER determinations.

1. An emissions unit's control technology shall be presumed to be comparable to LAER if the control technology achieves an emissions limitation that is at least as stringent as one of the five best performing similar sources for which a LAER determination has been made within the preceding 5 years and for which information

1 has been entered into the RACT/BACT/LAER Clearinghouse.

2 2. The cabinet shall consider any information on achieved-in-practice
3 pollution control technologies provided during the public comment period:

4 a. To determine the accuracy of any presumptive determination that the
5 control technology is comparable to LAER; and

6 b. To consider any additional LAER determinations of which the cabinet is
7 aware.

8 (b) The substantially-as-effective test. The owner or operator may
9 demonstrate that the emissions unit's control technology is substantially as effective as
10 LAER according to this paragraph. The cabinet:

11 1. Shall consider the evidence on a case-by-case basis that an owner or
12 operator, and any other person during the public participation process, provides to the
13 cabinet to demonstrate if the emissions unit's control technology is substantially as
14 effective as LAER; and

15 2. Shall determine if the emissions unit's air pollution control technology is
16 substantially as effective as LAER after considering the evidence.

17 (c) Time of comparison.

18 1. Emissions units with control technologies installed before provisions for
19 Clean Units are effective in the Kentucky SIP. The owner or operator of an emissions
20 unit for which control technology is installed before the provisions regarding Clean
21 Units are effective in the Kentucky SIP shall demonstrate to the cabinet that the
22 emissions limitation achieved by the emissions unit's control technology is comparable
23 to:

1 a. The LAER requirements that applied at the time the control technology
2 was installed; or

3 b. The current-day LAER requirements.

4 2. Emissions units with control technologies installed after provisions for
5 Clean Units are effective in the Kentucky SIP. The owner or operator of an emissions
6 unit for which control technology is installed after the provisions regarding Clean Units
7 are effective in the Kentucky SIP shall demonstrate to the cabinet that the emissions
8 limitation achieved by the emissions unit's control technology is comparable to current-
9 day LAER requirements.

10 (4) Effective date of the Clean Unit designation. The date that the owner or
11 operator may begin to use the Clean Unit test to determine if a project involving an
12 emissions unit is a major modification shall be the later of:

13 (a) The date that the permit or permit revision required by subsection (6) of
14 this section is issued; or

15 (b) The date that the emissions unit's air pollution control technology is
16 placed into service.

17 (5) Clean Unit expiration. The date the owner or operator shall no longer be
18 allowed to use the Clean Unit test to determine if a project involving an emissions unit
19 is, or is part of, a major modification shall be determined according to this subsection.

20 (a) For an emissions unit with a Clean Unit designation based on a
21 demonstration by the owner or operator that the emissions unit's control technology is
22 comparable to the LAER requirements that applied at the time the control technology
23 was installed, the Clean Unit designation shall expire ten (10) years from the date the

1 unit's control technology was installed.

2 (b) For all other emissions units, the Clean Unit designation shall expire ten
3 (10) years from the effective date of the Clean Unit designation.

4 (c) The Clean Unit designation shall expire at any time the owner or operator
5 fails to comply with the provisions for maintaining the Clean Unit designation according
6 to subsection (8) of this section.

7 (6) Procedures for designating emissions units as Clean Units.

8 (a) The cabinet shall designate an emissions unit a Clean Unit by issuing a
9 permit or permit revision under 401 KAR Chapter 52, including requirements for public
10 notice of the proposed Clean Unit designation and opportunity for public comment; and

11 (b) The permit or permit revision shall meet the requirements of subsection
12 (7) of this section.

13 (7) Required permit content. The Title V permit for a major stationary source
14 with a Clean Unit shall, after the effective date of the Clean Unit designation and in
15 accordance with the applicable provisions of 401 KAR Chapter 52, but not later than
16 the date the Title V permit is renewed, include the following terms and conditions:

17 (a) A statement indicating that the emissions unit qualifies as a Clean Unit
18 and identifying the pollutant for which the Clean Unit designation applies.

19 (b) The effective date of Clean Unit designation.

20 1. If the effective date is not known on the date the Clean Unit designation is
21 initially recorded in the Title V permit, the permit or permit revisions shall describe the
22 event that shall determine the effective date. Once the effective date is determined, the
23 owner or operator shall notify the cabinet of the exact date; and

1 2. If originally absent from the Title V permit, the effective date of the Clean
2 Unit shall be added to the source's Title V permit at the first opportunity the permit is
3 opened, but not later than the next renewal.

4 (c) The expiration date of Clean Unit designation.

5 1. If the expiration date is not known on the date the Clean Unit designation
6 is initially recorded in the Title V permit, the permit or permit revision shall describe the
7 event that shall determine the expiration date;

8 2. Once the expiration date is determined, the owner or operator shall notify
9 the cabinet of the exact date; and

10 3. If originally absent from the Title V permit, the expiration date shall be
11 added to the sources Title V permit at the first opportunity the permit is opened, but not
12 later than the next renewal.

13 (d) All emissions limitations and work practice requirements adopted in
14 conjunction with emissions limitations necessary to assure the control technology
15 continues to achieve an emissions limitation comparable to LAER and any physical or
16 operational characteristics that formed the basis for determining that the emissions
17 unit's control technology achieves a level of emissions control comparable to LAER.

18 (e) Monitoring, recordkeeping, and reporting requirements as necessary to
19 demonstrate that the emissions unit continues to meet the criteria for maintaining the
20 Clean Unit designation pursuant to subsection (8) of this section.

21 (f) Terms reflecting the owner or operator's duty to maintain the Clean Unit
22 designation and the consequences of failing to do so, according to subsection (8) of
23 this section.

1 (8) Maintaining the Clean Unit designation.

2 (a) The owner or operator shall conform to the provisions of this subsection
3 to maintain Clean Unit status.

4 1. To ensure that the control technology continues to achieve emissions
5 control comparable to LAER, the Clean Unit shall comply with the emissions limitations
6 or work practice requirements adopted in conjunction with those that are comparable to
7 LAER, which are recorded in the source's major NSR permit or permit revisions and
8 subsequently reflected in the Title V permit that designates the unit as a Clean Unit.

9 2. The owner or operator shall not make a physical change in or change in
10 the method of operation of the Clean Unit that causes the emissions unit to function in
11 a manner that is inconsistent with the physical or operational characteristics that
12 formed the basis for the determination that the control technology is achieving a level of
13 emissions control that is comparable to LAER.

14 3. The Clean Unit shall comply with all terms and conditions in the Title V
15 permit related to the unit's Clean Unit designation.

16 4. The Clean Unit shall continue to control emissions using the specific air
17 pollution control technology that was the basis for its Clean Unit designation. The
18 Clean Unit designation shall end if the emissions unit or control technology is replaced.

19 (b) The requirements of this subsection shall apply to each pollutant for
20 which the cabinet has designated an emissions unit a Clean Unit. Failing to conform to
21 the restrictions for one pollutant shall only affect the Clean Unit designation for that
22 pollutant.

23 (9) Offsets and Netting at Clean Units.

1 (a) Emissions changes that occur at a Clean Unit shall not be included in
2 calculating a significant net emissions increase to be used in a netting analysis or for
3 offsets, unless:

4 1. Such use occurs before the date the Clean Unit provisions are effective in
5 the Kentucky SIP or after the Clean Unit designation expires; or

6 2. The emissions unit reduces emissions below the level that qualified the
7 unit as a Clean Unit.

8 (b) The owner or operator may generate a credit for the difference between
9 the level that qualified the unit as a Clean Unit and the new emissions limitation, if:

10 1. The unit reduces emissions below the level that qualified the unit as a
11 Clean Unit; and

12 2. The reductions are surplus, quantifiable, and permanent.

13 (c) For generating offsets, reductions shall be federally enforceable.

14 (d) For determining creditable net emissions increases and decreases, the
15 reductions shall be enforceable as a practical matter.

16 (10) Effect of area redesignation on Clean Units.

17 (a) The Clean Unit designation of an emissions unit shall not be affected by
18 redesignation of the attainment status of the area in which it is located.

19 (b) If an existing Clean Unit designation expires or is lost, the unit shall re-
20 qualify as a Clean Unit according to the requirements that are currently applicable in
21 the area, regardless of the area's original attainment status during the previous
22 designation period. ~~[Significant Pollutant and Emission Rate. For this~~

23 administrative regulation, the following pollutant and emission rates shall be considered

1 significant.

Carbon monoxide:	100 per year (tpy)
Nitrogen oxides:	40 tpy
Sulfur dioxide:	40 tpy
Particulate matter:	25 tpy of particulate matter emissions
	15 tpy of PM ₁₀ emissions
Ozone ÷	40 tpy of volatile organic compounds
Lead:	0.6 tpy

2 **Section 13. PCP Exclusion Procedural Requirements.** For a project to
3 qualify for a PCP exclusion, an owner or operator shall comply with the provisions of
4 this section.

5 (1) To request a PCP designation for a project the owner or operator shall:

6 (a) Submit a notice to the cabinet before beginning actual construction for a
7 project that is listed in the definition for "pollution control project" in 401 KAR 51:001,
8 Section 1(188)(a) to (f); or

9 (b) Submit an application for a permit or permit revision and obtain approval
10 to use the PCP exclusion from the cabinet according to subsection (5) of this section
11 for a project that is not listed in 401 KAR 51:001, Section 1(188)(a) to (f).

12 (2) The owner or operator for all projects that rely on the PCP exclusion shall
13 perform:

14 (a) An environmentally beneficial analysis.

15 1. The environmental benefit from the emissions reductions of pollutants

regulated under 42 U.S.C. 7401 to 7671q (Clean Air Act) shall outweigh the environmental detriment of emissions increases in pollutants regulated under the Act; and

2. A statement that the project is implementing a technology from those listed in 401 KAR 51:001, Section 1(188)(a) to (f) shall satisfy the requirement in subparagraph 1 of this paragraph.

(b) Air quality analysis. The emissions increases from the project shall not:

1. Cause or contribute to a violation of any national ambient air quality standard or PSD increment; or

2. Adversely impact visibility or another air quality related value that has been identified for a federal Class I area by a federal land manager and for which information is available to the general public.

(3) Content of notice or application for a permit or permit revision. The owner or operator shall include the following information in the notice or application for a permit or permit revision submitted to the cabinet for a PCP:

(a) A description of the project;

(b) The potential emissions increases and decreases of any pollutant regulated under the Act and the projected emissions increases and decreases that will result from the project;

(c) A copy of the environmentally beneficial analysis required by subsection (2)(a) of this section;

(d) A description of all methods, including monitoring and recordkeeping, that shall be used on an ongoing basis to demonstrate that the project is environmentally

beneficial and sufficient to meet the applicable requirements of 401 KAR Chapter 52;

(e) A certification that the project shall be designed and operated in a manner that is consistent with:

1. The proper industry and engineering practices;

2. The environmentally beneficial analysis and air quality analysis required by subsection (2)(a) and (b) of this section;

3. The information submitted in the notice or permit application; and

4. Procedures that minimize emissions of collateral pollutants within the physical configuration and operational standards usually associated with the emissions control device or strategy.

(f) Demonstration that the PCP shall not have an adverse air quality impact.

1. The demonstration requirement may be satisfied with modeling, screening level modeling results, a statement that the collateral emissions increase is included within the parameters used in the most recent modeling exercise as required by subsection (2)(b) of this section, or another method approved by the cabinet.

2. An air quality impact analysis shall not be required for any pollutant that will not experience a significant emissions increase from the project.

(4) Notice process for listed projects. The owner or operator:

(a) May begin actual construction of a PCP project immediately after notice is sent to the cabinet for projects listed in the definition of "pollution control project" in 401 KAR 51:001, Section 1(188)(a) to (f); and

(b) Shall respond to any requests by the cabinet for additional information necessary to evaluate the suitability of the project for a PCP exclusion.

1 (5) Permitting process for unlisted projects.

2 (a) The owner or operator shall not begin actual construction of a PCP that is
3 not listed in 401 KAR 51:001, Section 1(188)(a) to (f) until the cabinet approves and
4 issues a permit or permit revision for the project according to 401 KAR 52:020. These
5 procedures shall include the cabinet providing the public with:

6 1. Notice of the proposed approval;

7 2. Access to the environmentally beneficial analysis and the air quality
8 analysis; and

9 3. At least a thirty (30) day period for the public and the U.S. EPA to submit
10 comments.

11 (b) The cabinet shall address all material comments received by the end of
12 the comment period before taking final action on the permit or permit revision.

13 (6) Operational requirements. Upon installation of the PCP, the owner or
14 operator shall comply with the requirements of this subsection.

15 (a) General duty. The owner or operator shall operate the PCP in a manner
16 that is consistent with:

17 1. Proper industry and engineering practices;

18 2. The environmentally beneficial analysis and air quality analysis required
19 by subsection (2)(a) and (b) of this section;

20 3. Information submitted in the notice or application for a permit or permit
21 revision required by subsection (3) of this section; and

22 4. Procedures that minimize emissions of collateral pollutants within the
23 physical configuration and operational standards usually associated with the emissions

1 control device or strategy.

2 **(b) Recordkeeping.** To prove that the PCP is operated consistent with the
3 general duty requirements in paragraph (a) of this subsection, the owner or operator
4 shall maintain copies on site, of:

5 1. The environmentally beneficial analysis;

6 2. The air quality impacts analysis; and,

7 3. The monitoring and other emissions records.

8 **(c) Permit requirements.** The owner or operator shall comply with all
9 provisions in a permit issued under 401 KAR 52:020 related to use and approval of the
10 PCP exclusion.

11 **(d) Generation of emissions reduction credits.**

12 1. Emissions reductions created by a PCP shall not be included in
13 calculating a significant net emissions increase or for generating offsets, unless the
14 emissions unit further reduces emissions after qualifying for the PCP exclusion.

15 2. The owner or operator may generate a credit for the difference between
16 the level of reduction that was used to qualify for the PCP exclusion and the new
17 emissions limitation if such reductions are surplus, quantifiable, and permanent.

18 3. For generating offsets, the reductions shall also be federally enforceable.

19 4. For determining creditable net emissions increases and decreases, the
20 reductions shall also be enforceable as a practical matter. **[Significant Levels of Air**
21 **Quality Impact.** ~~For this administrative regulation, the following levels of air quality~~
22 ~~impact shall be considered significant.]~~

[Pollutant	Annual Average	Averaging Time			
		24-Hour	8-Hour	3-Hour	1-Hour
Sulfur Dioxide	1.0 ? g/m ³	5 ? g/m ³	--	25 ? g/m ³	--
PM ₁₀	1.0 ? g/m ³	5 ? g/m ³	--	--	--
Nitrogen Dioxide	-	-	-	-	-
	1.0 ? g/m ³	--	--	--	--
Carbon Monoxide	-	-	-	-	-
	--	--	0.5mg/m ³	--	2mg/m ³]

Section 14. Plantwide Applicability Limit Provisions. The cabinet may approve the use of an actuals PAL (PAL) for an existing major stationary source if the PAL meets the requirements of this section.

(1) General provisions.

(a) An owner or operator may execute a project without triggering major NSR, if the source maintains its total source-wide emissions below the PAL level, meets the requirements in this section, and complies with the PAL permit. If these conditions are met, a project:

1. Shall not be considered a major modification for the PAL pollutant;

2. Shall not have to be approved through Kentucky's major NSR program;

and

3. Shall not be subject to the provisions of Section 7(4) of this administrative regulation concerning restrictions on relaxing enforceable emissions limitations that the major stationary source used to avoid applicability of the major NSR program.

1 **(b) Except as provided under subparagraph (1)(a)3 of this section, the major**
2 **stationary source shall continue to comply with all applicable federal or state**
3 **requirements, emissions limitations, and work practice requirements that were**
4 **established prior to the effective date of the PAL.**

5 **(c) The cabinet shall not allow a PAL for VOC or NOx for any major**
6 **stationary source located in an extreme ozone nonattainment area.**

7 **(2) Permit application requirements. The owner or operator of a major**
8 **stationary source shall submit the following information to the cabinet for approval as**
9 **part of an application for a permit or permit revision requesting a PAL:**

10 **(a) A list of all emissions units at the source designated as small, significant**
11 **or major, based on their potential to emit;**

12 **(b) Identification of the federal and state applicable requirements, emissions**
13 **limitations, and work practice requirements that apply to each emissions unit;**

14 **(c) Calculations of the baseline actual emissions for the emissions units with**
15 **supporting documentation; and**

16 **(d) The calculation procedures the owner or operator proposes to use to**
17 **convert the monitoring system data to monthly emissions and annual emissions based**
18 **on a twelve (12) month rolling total for each month as required by subsection (12)(a) of**
19 **this section.**

20 **(3) Establishing a PAL. The cabinet shall establish a PAL at a major**
21 **stationary source in a federally enforceable permit pursuant to the requirements of this**
22 **section.**

23 **(a) The PAL shall impose an annual emissions limitation in tons per year that**

1 is enforceable as a practical matter for the entire major stationary source, where:

2 1. For each month during the PAL effective period after the first twelve (12)
3 months of establishing a PAL, the owner or operator shall show that the sum of the
4 monthly emissions from each emissions unit under the PAL for the previous twelve (12)
5 consecutive months is less than the PAL as a twelve (12) month average, rolled
6 monthly; and

7 2. For each month during the first eleven (11) months from the PAL effective
8 date, the owner or operator shall show that the sum of the preceding monthly emissions
9 from the PAL effective date for each emissions unit under the PAL is less than the PAL;

10 (b) The PAL shall be established in a PAL permit that:

11 1. Meets the public participation requirements in subsection (4) of this
12 section; and

13 2. Contains all the requirements of subsection (6) of this section;

14 (c) A PAL shall include fugitive emissions, to the extent quantifiable, from all
15 emissions units that emit or have the potential to emit the PAL pollutant at the major
16 stationary source;

17 (d) Each PAL shall regulate emissions of only one pollutant;

18 (e) Each PAL shall have a PAL effective period of ten (10) years;

19 (f) The owner or operator of a major stationary source with a PAL shall
20 comply with the monitoring, recordkeeping, and reporting requirements of subsections
21 (11) to (13) of this section for each emissions unit under the PAL through the PAL
22 effective period; and

23 (g) Emissions reductions of a PAL pollutant that occur during the PAL

effective period shall not be creditable as decreases for offsets under 40 C.F.R. 51.165(a)(3)(ii), unless:

1. The level of the PAL is reduced by the amount of such emissions reductions; and

2. The reductions will be creditable in the absence of the PAL.

(4) Public participation requirements. PALs for existing major stationary sources shall be established, renewed, or increased pursuant to this subsection and the applicable procedures of 401 KAR 52:100 for issuing permits or permit revisions.

The cabinet shall:

(a) Provide the public with notice of the proposed approval of a PAL permit with at least a thirty (30) day period for submittal of public comment; and

(b) Address all material comments before taking final action on a PAL permit or permit revision.

(5) Setting the ten (10) year PAL level.

(a) The PAL level for a major stationary source shall be the sum of the baseline actual emissions of the PAL pollutant for each emissions unit at the source during the chosen twenty-four (24) month period plus the applicable significant level for the PAL pollutant under the definition for "significant" in 401 KAR 51:001, Section 1(220) or under the Act, whichever is lower.

(b) In establishing a PAL level for a PAL pollutant, only one consecutive twenty-four (24) month period shall be used to determine the baseline actual emissions for all existing emissions units.

(c) A different consecutive twenty-four (24) month period may be used for

1 each different PAL pollutant.

2 (d) Emissions associated with units that were permanently shutdown after the
3 chosen twenty-four (24) month period shall be subtracted from the PAL level.

4 (e) The PAL permit shall contain all the requirements of subsection (6) of this
5 section.

6 (f) Emissions from units for which actual construction began after the twenty-
7 four (24) month period shall be added to the PAL level in an amount equal to the
8 potential to emit of the units.

9 (g) The cabinet shall specify a reduced PAL level in the PAL permit to
10 become effective on the future compliance date of any applicable federal or state
11 regulatory requirement that the cabinet is aware of prior to issuance of the PAL permit.

12 (6) Contents of the PAL permit. The PAL permit shall contain the following
13 information:

14 (a) The PAL pollutant and the applicable source-wide emissions limitation in
15 tons per year;

16 (b) The PAL permit effective date and the expiration date of the PAL or PAL
17 effective period;

18 (c) Specification in the PAL permit that if a major stationary source owner or
19 operator applies to renew a PAL under subsection (9) of this section before the end of
20 the PAL effective period, the PAL shall remain in effect until a revised PAL permit is
21 issued by the cabinet;

22 (d) A requirement that emissions calculations for compliance purposes
23 include emissions from startups, shutdowns and malfunctions;

1 (e) A requirement that, once the PAL expires, the major stationary source is
2 subject to the requirements of subsection (8) of this section;

3 (f) The calculation procedures that the major stationary source owner or
4 operator shall use to convert the monitoring system data to monthly emissions and
5 annual emissions based on a twelve (12) month rolling total for each month as required
6 by subsection (12)(a) of this section;

7 (g) A requirement that the major stationary source owner or operator shall
8 monitor all emissions units in accordance with the provisions in subsection (12) of this
9 section;

10 (h) A requirement that the owner or operator shall retain the records required
11 under subsection (12) of this section on site. Records may be retained in an electronic
12 format or another acceptable format approved by the cabinet;

13 (i) A requirement for the owner or operator to submit, by the reports required
14 under subsection (13) of this section by the required deadlines; and

15 (j) Other requirements necessary to implement and enforce the PAL.

16 (7) PAL effective period and reopening of a PAL permit.

17 (a) A PAL effective period shall be ten (10) years.

18 (b) The cabinet shall reopen a PAL permit to:

19 1. Correct typographical or calculation errors made in setting the PAL;

20 2. Reflect a more accurate determination of emissions used to establish the
21 PAL;

22 3. Reduce the PAL if the owner or operator of the major stationary source
23 creates creditable emissions reductions for use as offsets under 40 C.F.R.

1 51.165(a)(3)(ii); or

2 4. Revise the PAL to reflect an increase in the PAL according to subsection
3 (10) of this section.

4 (c) The cabinet may reopen the PAL permit, during the PAL effective period,
5 to:

6 1. Reduce the PAL to reflect newly applicable federal requirements with
7 compliance dates after the PAL effective date;

8 2. Reduce the PAL consistent with any other requirement:

9 a. Enforceable as a practical matter; and,

10 b. Imposed on the major stationary source under the SIP; and

11 3. Reduce the PAL if the cabinet determines that a reduction is necessary to
12 avoid causing or contributing to:

13 a. A National Ambient Air Quality Standard (NAAQS) or PSD increment
14 violation; or

15 b. An adverse impact on visibility or another air quality related value that has
16 been identified for a federal Class I area by a federal land manager and for which
17 information is available to the general public.

18 (d) All permit reopenings shall be carried out under the public participation
19 requirements of subsection (4) of this section except for permit reopenings to correct
20 typographical or calculation of errors that do not increase the PAL level.

21 (8) Expiration of a PAL. A PAL that is not renewed shall expire at the end of
22 the PAL effective period and the requirements of this subsection shall then apply.

23 (a) Each emissions unit, or each group of emissions units, that existed under

1 the PAL shall comply with an allowable emissions limitations under a revised permit
2 established as follows:

3 1. An owner or operator of a major stationary source using a PAL shall
4 submit a proposed allowable emissions limitation for each emissions unit, or each
5 group of emissions units, by distributing the PAL allowable emissions for the major
6 stationary source among each of the emissions units that existed under the PAL.

7 a. This proposal shall be submitted to the cabinet at least six (6) months
8 before the expiration of the PAL permit but not sooner than eighteen (18) months
9 before permit expiration.

10 b. If the PAL has not yet been adjusted for an applicable requirement that
11 became effective during the PAL effective period, as required under subsection (9)(e)
12 of this section, distribution of allowable emissions shall be made as if the PAL has been
13 adjusted.

14 2. The cabinet shall decide the date and procedure the owner or operator
15 shall use to distribute the PAL allowable emissions.

16 3. The cabinet shall issue a revised permit incorporating allowable limits for
17 each emissions unit, or each group of emissions units, as the cabinet determines is
18 appropriate.

19 (b) Each emissions unit shall comply with the allowable emissions limitation
20 on a twelve (12) month rolling basis. The cabinet may approve the use of monitoring
21 systems other than CEMS, CERMS, PEMS or CPMS to demonstrate compliance with
22 the allowable emissions limitation.

23 (c) The source shall continue to comply with a source-wide, multi-unit

emissions cap equivalent to the level of the PAL emissions limitation until the cabinet issues the revised permit incorporating allowable limits for each emissions unit or each group of emissions units.

(d) A major modification at the major stationary source shall be subject to major NSR requirements.

(e) The major stationary source owner or operator shall continue to comply with any state or federal applicable requirements eliminated by the PAL that applied during or before the PAL effective period, except for those emissions limitations established pursuant to Section 7(4) of this administrative regulation.

(9) Renewal of a PAL.

(a) Public participation requirements.

1. The cabinet shall follow the public participation procedures specified in subsection (4) of this section in approving a request to renew a PAL for a major stationary source.

2. The cabinet shall provide a written rationale for the proposed PAL level for public review and comment.

3. Any person may propose a PAL level for the source for consideration by the cabinet during the public review period.

(b) Application deadline.

1. A major stationary source owner or operator shall submit an application for renewal of a PAL at least six (6) months before the date of permit expiration but not earlier than eighteen (18) months before permit expiration.

2. The deadline for application submittal shall ensure that the permit shall

1 not expire before the permit is renewed.

2 3. If a complete application for renewal is submitted within the timeframe
3 specified in subparagraph 1 of this paragraph, the PAL shall continue to be effective
4 until the revised permit with the renewed PAL is issued.

5 (c) Application requirements. The application to renew a PAL permit shall
6 contain:

7 1. The information required in subsection (2) of this section;

8 2. A proposed PAL level;

9 3. The sum of the potential to emit of all emissions units under the PAL with
10 supporting documentation; and

11 4. Any other information the owner or operator wishes the cabinet to
12 consider in determining the appropriate level to renew the PAL.

13 (d) PAL adjustment.

14 1. A PAL shall not exceed the source's potential to emit. The cabinet shall
15 adjust the PAL downward to a level no greater than the potential to emit if a source's
16 potential to emit has declined below the PAL level.

17 2. The cabinet may renew the PAL at the same level as the current PAL
18 without considering the factors specified in subparagraph 3 of this section, if the
19 emissions level calculated according to subsection (5) of this section is equal to or
20 greater than eighty (80) percent of the PAL level; or

21 3. The cabinet may set the PAL at a level that is determined to be:

22 a. More representative of the source's baseline actual emissions; or

23 b. Appropriate considering the following factors:

1 (i) Air quality needs;
2 (ii) Advances in control technology;
3 (iii) Anticipated economic growth in the area of the source;
4 (iv) The cabinet's goal of promoting voluntary emissions reductions; and
5 (v) Other factors as specifically identified by the cabinet in its written
6 rationale for setting the PAL level.

7 4. The cabinet shall not approve a renewed PAL level higher than the
8 current PAL, unless the major stationary source has complied with the provisions of
9 subsection (10) of this section.

10 (e) The PAL shall be adjusted at the time of PAL permit renewal or Title V
11 permit renewal, whichever comes first, if:

12 1. The compliance date for a state or federal applicable requirement that
13 applies to the PAL source occurs during the PAL effective period; and

14 2. The cabinet has not already adjusted for such requirement.

15 (10) Increasing a PAL during the PAL effective period. The cabinet may
16 increase a PAL emissions limitation during the PAL effective period if the major
17 stationary source complies with the provisions of this subsection.

18 (a) Application procedures. The owner or operator of the major stationary
19 source shall submit a complete application for a PAL increase that includes the
20 following:

21 1. Identification of the emissions units contributing to the increase in
22 emissions for the PAL major modification;

23 2. Demonstration that increased PAL, as calculated in paragraph (c) of this

1 subsection does not exceeds the PAL.

2 a. The level of control that results from BACT equivalent controls on each
3 significant or major emissions unit shall be determined by conducting a new BACT
4 analysis at the time the application is submitted, unless the emissions unit is currently
5 required to comply with a BACT or LAER requirement that was established within the
6 preceding ten (10) years.

7 b. If an emissions unit currently complies with BACT or LAER, the assumed
8 control level for that emissions unit shall be equal to the current level of BACT or LAER
9 for that emissions unit; and

10 3. A statement that the increased PAL level shall be effective on the day any
11 emissions unit that is part of the PAL major modification becomes operational and
12 begins to emit the PAL pollutant.

13 (b) NSR permit and compliance requirement. The owner or operator shall
14 obtain a major NSR permit for all emissions units contributing to the increase in
15 emissions for the PAL major modification.

16 1. A significant level shall not apply in deciding for which emissions units a
17 major NSR permit shall be obtained; and

18 2. Emissions units that obtain a major NSR permit shall comply with any
19 emissions requirements resulting from the major NSR process, even though the units
20 shall also become subject to the PAL or shall continue to be subject to the PAL.

21 (c) Calculation of increased PAL. The cabinet shall calculate the new PAL
22 as the sum of the allowable emissions for each modified or new emissions unit, plus the
23 sum of the baseline actual emissions of the significant and major emissions units

1 assuming application of BACT equivalent controls, plus the sum of the baseline actual
2 emissions of the small emissions units.

3 (d) Public notice requirement. The public notice requirements of subsection
4 (4) of this section shall be followed during PAL permit revision for an increased PAL
5 level.

6 (11) Monitoring requirements for PALs.

7 (a) General requirements.

8 1. Each PAL permit shall contain enforceable requirements for the chosen
9 monitoring system that accurately determines plantwide emissions of the PAL pollutant
10 in terms of mass per unit of time;

11 2. A monitoring system authorized for use in the PAL permit shall be:

12 a. Approved by the cabinet; and

13 b. Based on sound science and meet generally acceptable scientific
14 procedures for data quality and manipulation;

15 3. The data generated by a monitoring system shall meet minimum legal
16 requirements for admissibility in a judicial proceeding to enforce the PAL permit;

17 4. The PAL monitoring system shall employ one or more of the four general
18 monitoring approaches meeting the minimum requirements set forth in paragraph (b) of
19 this subsection;

20 5. The cabinet may approve an alternative monitoring approach that meets
21 the requirements of subparagraphs 1 to 3 of this paragraph; and

22 6. Failure to use a monitoring system that meets the requirements of this
23 section shall render the PAL invalid.

1 (b) Minimum performance requirements for approved monitoring approaches.
2 If conducted in accordance with the minimum requirements in paragraphs (c) to (i) of
3 this subsection, the following shall be acceptable monitoring approaches:

- 4 1. Mass balance calculations for activities using coatings or solvents;
- 5 2. CEMS;
- 6 3. CPMS or PEMS; and
- 7 4. Emissions factors.

8 (c) Mass balance calculations. An owner or operator using mass balance
9 calculations to monitor PAL pollutant emissions from activities using coatings or
10 solvents shall:

11 1. Provide a demonstrated means of validating the published content of the
12 PAL pollutant that is contained in or created by all materials used in or at the emissions
13 unit;

14 2. If it cannot be accounted for in the process, assume that the emissions
15 unit emits all of the PAL pollutant that is contained in or created by any raw material or
16 fuel used in or at the emissions unit; and

17 3. If the vendor of the material or fuel from which the pollutant originates
18 publishes a range, use the highest value of the published range of pollutant content to
19 calculate the PAL pollutant emissions, unless the cabinet determines there is site-
20 specific data or a site-specific monitoring program to support another pollutant content
21 within the range.

22 (d) CEMS. An owner or operator using CEMS to monitor PAL pollutant
23 emissions shall meet the following requirements:

1 1. CEMS shall comply with applicable Performance Specifications found in
2 40 C.F.R. Part 60, appendix B; and

3 2. CEMS shall sample, analyze, and record data at least every fifteen (15)
4 minutes while the emissions unit is operating.

5 (e) CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor
6 PAL pollutant emissions shall meet the following requirements:

7 1. The CPMS or the PEMS shall be based on current site-specific data
8 demonstrating a correlation between the monitored parameter and the PAL pollutant
9 emissions across the range of operation of the emissions unit; and

10 2. While the unit is operating, each CPMS or PEMS shall sample, analyze,
11 and record data at least every fifteen (15) minutes, or at another less frequent interval
12 approved by the cabinet.

13 (f) Emissions factors. An owner or operator using emissions factors to
14 monitor PAL pollutant emissions shall meet the following requirements:

15 1. All emissions factors shall be adjusted, if appropriate, to account for the
16 degree of uncertainty or limitations in the factors' development;

17 2. The emissions unit shall operate within the designated range of use for
18 the emissions factor, if applicable; and

19 3. If technically practicable, the owner or operator of a significant emissions
20 unit that relies on an emissions factor to calculate PAL pollutant emissions shall
21 conduct validation testing to determine a site-specific emissions factor within six (6)
22 months of PAL permit issuance, unless the cabinet determines that testing is not
23 required.

1 (g) A source owner or operator shall record and report maximum potential
2 emissions without considering enforceable emissions limitations or operational
3 restrictions for an emissions unit during any period of time there is no monitoring data,
4 unless another method for determining emissions during such periods is specified in
5 the PAL permit.

6 (h) If an owner or operator of an emissions unit cannot demonstrate a
7 correlation between the monitored parameters and the PAL pollutant emissions rate at
8 all operating points of the emissions unit, as an alternative to the requirements in
9 paragraphs (c) to (g) of this subsection, at the time of permit issuance the cabinet shall:

10 1. Establish default values for determining compliance with the PAL based
11 on the highest potential emissions reasonably estimated at operating points if a
12 correlation cannot be demonstrated; or

13 2. If there is no correlation between monitored parameters and the PAL
14 pollutant emissions, determine that operation of the emissions unit during operating
15 conditions is a violation of the PAL.

16 (i) Re-validation. All data used to establish the PAL pollutant shall be
17 revalidated through performance testing or other scientifically valid means approved by
18 the cabinet. Validation testing shall occur at least once every five (5) years after
19 issuance of the PAL.

20 (12) Recordkeeping requirements.

21 (a) The PAL permit shall require an owner or operator to retain a copy of all
22 records necessary to determine compliance with any requirement of this section and of
23 the PAL, including a determination of each emissions unit's twelve (12) month rolling

1 total emissions for five (5) years from the date of the determination.

2 (b) The PAL permit shall require an owner or operator to retain a copy of the
3 following records for the duration of the PAL effective period plus five (5) years:

4 1. A copy of the PAL permit application and any applications for revisions to
5 the PAL; and

6 2. Each annual certification of compliance pursuant to Title V and the data
7 used to certify the compliance.

8 (13) Reporting and notification requirements. The owner or operator shall
9 submit semi-annual monitoring reports and prompt deviation reports to the cabinet in
10 accordance with 401 KAR Chapter 52 that meet the following requirements:

11 (a) Semi-annual report. The semiannual report shall be submitted to the
12 cabinet within thirty (30) days of the end of each reporting period and shall contain:

13 1. The identification of owner and operator and the permit number;

14 2. Total annual emissions, in tpy, based on a twelve (12) month rolling total
15 for each month in the reporting period recorded pursuant to subsection (12)(a) of this
16 section:

17 3. All data used in calculating the monthly and annual PAL pollutant
18 emissions, including any quality assurance or quality control data;

19 4. A list of any emissions units modified or added to the major stationary
20 source during the preceding six (6) month period;

21 5. The number, duration, and cause of any deviations or monitoring
22 malfunctions, other than the time associated with zero and span calibration checks, and
23 any corrective action following a deviation;

1 6. A notification of permanent or temporary shutdown of any monitoring
2 system including:

3 a. The reason for the shutdown;

4 b. The anticipated date that the monitoring system shall be fully operational
5 or shall be replaced with another monitoring system;

6 c. If applicable, a statement that the emissions unit monitored by the
7 monitoring system continued to operate without the monitoring system; and

8 d. The calculation of the emissions of the pollutant or the number
9 determined according to subsection (11)(g) of this section that is included in the permit;
10 and

11 7. A signed statement by the responsible official, as defined by 401 KAR
12 52:001, certifying the truth, accuracy, and completeness of the information provided in
13 the semiannual report.

14 (b) Deviation report. The major stationary source owner or operator shall
15 submit reports of any deviation or exceedance of the PAL requirements, including
16 periods monitoring is unavailable.

17 1. A report submitted pursuant to 40 C.F.R. 70.6(a)(3)(iii)(B) shall satisfy this
18 deviation reporting requirement;

19 2. The deviation report shall be submitted within the time limits prescribed
20 by the applicable program implementing 40 C.F.R. 70.6(a)(3)(iii)(B);

21 3. The deviation report shall contain the following information:

22 a. The identification of the owner, the operator and the permit number;

23 b. The PAL requirement that experienced the deviation or that was

1 exceeded;

2 c. Emissions resulting from the deviation or the exceedance; and

3 d. A signed statement by the responsible official, as defined by 401 KAR
4 52:001, certifying the truth, accuracy, and completeness of the information provided in
5 the report.

6 (c) Re-validation results. The owner or operator shall submit to the cabinet
7 the results of any re-validation test or method within three (3) months after completion
8 of the test or method.

9 (14) Transition requirements.

10 (a) After the U.S. EPA approves the Kentucky SIP revisions for the PAL
11 provisions published in 67 Fed. Reg. 80186, December 31, 2002, the cabinet shall only
12 issue a PAL that complies with the requirements of this section.

13 (b) The cabinet may supersede a PAL that was established before the date
14 the U.S. EPA approves the Kentucky SIP revisions for the PAL provisions published in
15 67 Fed. Reg. 80186, December 31, 2002, with a PAL that complies with the
16 requirements of this section.

Date

LaJuana S. Wilcher, Secretary
Environmental and Public Protection Cabinet

PUBLIC HEARING: A public hearing on this administrative regulation shall be held on April 30, 2004, at 10:00 a.m. (Eastern Time) in the Conference Room of the Division for Air Quality at 803 Schenkel Lane, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify this agency in writing by April 23, 2004, five (5) workdays prior to the hearing, of their intent to attend.

This hearing is open to the public. Any person who wishes to be heard will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will be made. If you request a transcript, you will be required to pay for it.

If you do not wish to be heard at the public hearing, you may submit written comments on the proposed administrative regulation. Written comments shall be accepted until April 30, 2004. Send written notification of intent to be heard at the hearing or written comments on the proposed administrative regulation to the contact person.

The hearing facility is accessible to persons with disabilities. Requests for reasonable accommodations, including auxiliary aids and services necessary to participate in the hearing, may be made to the contact person at least five (5) workdays prior to the hearing.

CONTACT PERSON: Millie Ellis, Environmental Technologist III, Regulation Development Section, Division for Air Quality, 803 Schenkel Lane, Frankfort, Kentucky 40601, telephone number (502) 573-3382, and facsimile number (502) 573-3787.

REGULATORY IMPACT ANALYSIS AND TEIRING STATEMENT

Administrative Regulation #: 401 KAR 51:052

Contact person: Millie Ellis

(1) Provide a brief summary of:

(a) What this administrative regulation does:

The administrative regulation provides for the nonattainment new source review (NSR). It applies to the construction or modification of major stationary sources constructing in areas that are designated nonattainment for the specified national ambient air quality standards (NAAQS) pollutants. The regulation applies only to the pollutant for which the area in which the source is locating is designated nonattainment and for which the source is major. To receive approval to construct, a source that is subject to this administrative regulation must show that it will not cause a net increase in pollution; will not create a delay in meeting the NAAQS; and that the source will install and use control technology that achieves the lowest achievable emissions rate (LAER).

(b) The necessity of this administrative regulation:

The administrative regulation contains a preconstruction review program for the construction or modification of any major stationary source of air pollution in a nonattainment area, as mandated under 42 U.S.C. 7501 to 7515 (Part D to Subpart 1 of the Clean Air Act). The administrative regulation is necessary in order to assure that the NAAQS are achieved and maintained; to protect visibility and other Air Quality Related Values (AQRVs) in national parks and other natural areas of special concern; to assure that appropriate emissions controls are applied; to maximize opportunities for economic development consistent with the preservation of clean air resources; and to ensure that any decision to increase air pollution is made only after full public consideration of all the consequences of such a decision.

(c) How this administrative regulation conforms to the content of the authorizing statutes:

KRS 224.10-100 requires the cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. Once major new source review is triggered under this administrative regulation, the source must, among other things, meet LAER requirements; show that it will not cause a net increase in pollution and that it will not create a delay in meeting the NAAQS. The administrative regulation also conforms to 40 C.F.R. 51.165, as amended by 67 Fed. Reg. 80186 and is no more stringent than this corresponding federal mandate.

(d) How this administrative regulation currently assists or will assist in the effective administration of the statutes:

The cabinet is required to promulgate administrative regulations for the prevention, abatement, and control of air pollution. The administrative regulation provides for the pre-construction review and permitting of construction or modification of major stationary sources locating in areas designated nonattainment for specified NAAQS, as required under Part D to Title I of the Clean Air Act. Most of the proposed changes to the administrative regulation are being made in order to bring the state regulation into conformance with the corresponding federal regulatory revisions for the NSR program.

(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:

(a) How the amendment will change this existing administrative regulation:

The amendment will update the administrative regulation to include the amendments to the federal rule published at 67 Fed. Reg. 80186 (December 31, 2002) and at 68 Fed. Reg. 63021 (November 7, 2003). The federal revisions include changes in NSR applicability requirements for modifications to allow sources more flexibility to respond to rapidly changing markets and to plan for future investments in pollution control and prevention technologies. These revisions address baseline actual emissions, actual-to-projected actual applicability test, Clean Unit test, plantwide applicability limitations (PALs), and pollution control projects (PCP). In addition to updating the existing provisions to agree with the current federal PSD rule, the language of the proposed administrative regulation has also been revised to conform to KRS Chapter 13A drafting requirements.

(b) The necessity of the amendment to this administrative regulation:

The amendment to the administrative regulation is necessary in order to comply with KRS Chapter 224 and to afford Kentucky's businesses and industries the flexibility to modernize their operations and remain competitive with facilities in surrounding states.

(c) How the amendment conforms to the content of the authorizing statutes:

The amendments to the administrative regulation conforms to KRS Chapter 224 as it is identical to the amendments to the federal regulation.

(d) How the amendment will assist in the effective administration of statutes:

In addition to updating the existing administrative regulation to agree with the current federal NSR rule, the proposed amendment is designed to streamline the NSR program and provide sources with regulatory certainty.

(3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation.

Approximately 43 entities are currently subject to the administrative regulation.

Entities potentially affected by the proposed amendment to the administrative regulation include the construction or modification of major stationary sources that construct in areas designated nonattainment and those that build or modify in the future. While affected sources will be in all industry groups, the majority of sources potentially affected by the amendment are expected to be in the following groups: electric utilities, petroleum refining, chemical processes, natural gas transport, pulp and paper mills, paper mills, automobile manufacturing, and pharmaceuticals.

(4) Provide an assessment of how the above group or groups will be impacted by either the implementation of this administrative regulation, if new, or by the change if it is an amendment:

The amendment includes changes in the NSR applicability requirements for modifications to allow source more flexibility to respond to rapidly changing markets and to plan for future investments in pollution control and prevention technologies. The changes are intended to provide greater regulatory certainty, administrative flexibility, and permit streamlining, while ensuring the current level of environmental protection and benefit derived from the NSR program.

(5) Provide an estimate of how much it will cost to implement this administrative regulation:

(a) Initially:

The division will not incur any additional costs to implement the administrative regulation.

(b) On a continuing basis:

There will not be any continuing costs associated with the implementation of the administrative regulation.

(6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation:

The division's operating budget will be used to implement and enforce the administrative regulation.

(7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment.

No increase in fees or funding is necessary to implement the proposed amendment to the administrative regulation.

(8) State whether or not this administrative regulation establishes any fees or directly or indirectly increases any fees.

The administrative regulation does not establish any fees, nor does it directly or indirectly increase any fees.

(9) TIERING: Is tiering applied? (Explain why tiering was or was not used.)

Yes. The administrative applies to major stationary sources or major modifications, which are defined to be sources that have a potential to emit of 100 tons per year or more of a regulated NSR pollutant, and modifications that result in a significant net emissions increase.

FEDERAL MANDATE ANALYSIS COMPARISON

Administrative Regulation #: 401 KAR 51:052

Contact person: Millie Ellis

1. **Federal statute or regulation constituting the federal mandate.**
The federal mandate is found at 50 C.F.R. 51.166 as amended at 67 Fed. Reg. 80186 (December 31, 2002).
2. **State compliance standards.**
The state compliance standards are found in KRS 224.10-100, 224.20-100, 224.20-110, and 224.20-120.
3. **Minimum or uniform standards contained in the federal mandate.**
The federal mandate requires any source described in Section 1 of the proposed administrative regulation to show that construction or modification of the source will not cause a net increase in pollution; will not create a delay in meeting the NAAQS; and that the source will install and use control technology that achieves the lowest achievable emissions rate (LAER)
4. **Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate?**
No. The amendments to the administrative regulation are identical to the amendments to the federal regulation and will impose no more stringent requirements than those required by the federal mandate.
5. **Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements.**
Stricter standards and requirements are not imposed.

FISCAL NOTE ON LOCAL GOVERNMENT

Administrative Regulation #: 401 KAR 51:052

Contact person: Millie Ellis

Phone Number: (502) 573-3382

New ☐ Amendment ☒

1. **Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government?**

Yes ☒ No ☐

2. **State what unit, part or division of local government this administrative regulation will affect.**

This administrative regulation will affect any unit, part, or division of local government operating a unit that meets the applicability determination of Section 1 of the administrative regulation.

3. **State the aspect or service of local government to which this administrative regulation relates.**

The most likely aspects of service of local government that are potentially affected by the administrative regulation are electric utilities and natural gas transport.

4. **Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the administrative regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.**

Revenues (+/-): There is no known effect on current revenues.

Expenditures (+/-): Although it cannot be quantified, this administrative regulation is designed result in a reduction in costs to the regulated community.

Other Explanation: There is no further explanation.